# Model (No 12) Course Specification: Crown and bridge

2015-2016

University: Mansoura University Faculty: Faculty of Dentistry Department: Fixed Prosthodontics

#### 1- Course data:

Faculty of Dentistry

Code: 304 Cb Course name: Crown and bridge Study year: 2<sup>nd</sup> year

Specialization: Bachelor of Dentistry

**Teaching Hours:** 

Lecture: 2hours/week Practical: 4hours/week

Number of units: 30

#### 2- Course aims: -

The course aim to provide student with basic knowledge and skills for pre-clinical fixed partial denture..

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

By the end of this course students should be able to:

## a. Knowledge and understanding

- a.1 Define basic fixed prosthodontics terminologies.
- a.2 Describe the different instruments and materials used in their practice.
- a.3 List basis for preparation of the tooth for different types of restorations.
- a.4 Describe different laboratory steps for construction of crown and bridge.

### b. Intellectual skills

- b.1 Select the appropriate preparation for each restoration with suitable instruments used.
- b.2 Think about the importance of each step of construction with subsequent steps.
- b.3 Estimate the causes of failure of restoration.

#### c. Professional and practical skills

- c.1 Practice the proper preparation design for selected restorations with suitable instruments used.
- c.2 Operate casts, working models and other records that are required for use in the laboratory fabrication of fixed dental prosthesis.
- c.3 Design waxing up for anterior and posterior crown.
- c.4 Discuss the scientific principles of sterilization and disinfection in the dental lab, to prevent cross infection and provide personal and environmental safety.

#### d. General and transferable skills

- d.1 Develop decisions based on sound ethical and scientific principles.
- d.2 Utilize information technology as a means of communication, for data collection and analysis, and for self-directed learning.
- d.3 Develop the basic concepts of quality assurance and practice management.
- d.4 Manage time, set priorities and work to prescribed time limit.

#### 4- Course contents: -

S	Topics	Week
1	Fixed prosthodontic terminology	1,2
2	Instruments used in fixed prosthodontics	3,4
3	Principles of tooth preparation	5,6,7,8
4	Preparation of complete coverage metal restoration	9,10
5	Preparation of all-ceramic restoration	11,12
6	Preparation of metal-ceramic restoration	13.14
7	Working cast and dies	15.16.17
8	Wax pattern	18,19
9	Spruing	20,21
10	Investing	22,23
11	Casting alloys	24,25
12	Casting methods	26,27
13	Finishing and casting defects	28,29,30

## 5- Teaching and learning methods:-

S	Method	Basic knowledge	Intellectual skills	Professional skills	General skills
1	Lecturing, Visual presentation, Power point presentation	V	V		
2	Practical demonstration in the simulation Laboratory			V	<b>√</b>

# 6- Teaching and learning methods of disables:-

None

## 7- Student assessment:-

## a. Student assessment methods

S	Method	Basic knowledge	Intellectual skills	Professional skills	General skills
1	Ongoing quiz assessments	$\sqrt{}$	V		
2	Written exam	$\sqrt{}$	$\sqrt{}$		
3	Oral exam				V
4	Practical exam				$\sqrt{}$

## b. Assessment schedule

S	Method	Week
1	Ongoing quiz assessments	January
2	Final Written exam	June
3	Oral examination	June
4	Practical examination	May

# c. Weighting of assessments

S	Method	Weight
1	Ongoing quiz assessments	12.5 %
2	Final Written examination	50 %
3	Oral examination	12.5 %
4	Practical examination	25 %

## 9- List of references

S	Item	Туре
1	Contemporary Fixed Prosthodontics, 5 <sup>th</sup> edition 2015 by Rosenstiel	Textbook
2	Fundamentals of fixed prosthodontics, 4 <sup>th</sup> edition 2012 by Herbert T. Shillingburg	Textbook

These books are available in faculty of dentistry library

# 10- Matrix of knowledge and skills of the course

S	Details	Basic knowledge	Intellectual skills	Professional skills	General skills
1	Fixed prosthodontic terminology	a1			d1,d2,d3,d4
2	Instruments used in fixed prosthodontics	a2	b1	c1,c4	d1,d2,d3,d4
3	Principles of tooth preparation	a3	b1	c1	d1,d2,d3,d4
4	Preparation of complete coverage metal restoration	a3	b1	c1	d1,d2,d3,d4
5	Preparation of all- ceramic restoration	a3	b1	c1	d1,d2,d3,d4
6	Preparation of metal- ceramic restoration	a3	b1	c1	d1,d2,d3,d4
7	Working casts and dies	a4	b2	c2,c4	d1,d2,d3,d4
8	Wax pattern	a4	b2	c3	d1,d2,d3,d4
9	Spruing	a4	b2	c2	d1,d2,d3,d4
10	Investing	a4	b2	c2	d1,d2,d3,d4
11	Casting alloys	a4	b2	c2	d1,d2,d3,d4
12	Casting techniques	a4	b2	c2	d1,d2,d3,d4
13	Finishing and casting defects	a4	b2,b3	c2	d1,d2,d3,d4

# **Course Coordinator(s):**

Prof. Dr. Ahmed Attia Dr. Waleed Abd El Ghafar

# **Head of department:**

Prof. Dr. Mohamed Ghazy