

## Removable prosthodontics (first year)

### Dental material

السنة الاولى : خواص المواد

المحاضرات والتدريب العملي:

Topics	Objectives
Introduction	Introduction to the course of dental materials, History, aims objectives and need of the course. ADA and other specifications, standards
Classification of Dental Materials	To study Classification of Dental Materials, Biological properties of dental materials, Mechanical properties of dental materials, Optical properties, Rheology of materials in general.
Gypsum Products	To study Gypsum Products, source, manufacture, properties, manipulation, factors controlling the setting reaction and setting time, applications care of products and understanding differences in physical properties between dental plaster and stone.
Impression materials	To study and understand Impression Materials, types, trays, ideal requisites of materials and their composition, role of each ingredient, properties, manipulation, setting reaction and control of factors affecting setting, applications, advantages, disadvantages of and method of disinfecting the following materials, impression compound, Zinc Oxide eugenol impression paste, hydrocolloids, elastomers and impression plaster
Waxes	To study and understand nature of wax, sources, properties, manipulative precautions, classification of dental waxes, presentation and various uses in dentistry.
Denture base materials	To study desirable properties of denture base materials, Classification, Composition of acrylic resin ,Polymerizations types of Polymers, Copolymers and Thermoplastic materials, Properties,

	Manipulation, Packing and Processing of acrylic resins, Porosities, Self-curing acrylic resin, Light-curing denture base resins.
Model, Cast and Die materials	To know various Cast and Die Materials, requirements, types, properties, manipulation and application of various die materials.
Casting investment Materials	Study various Dental Casting Investment Materials; Production, Classification and Ideal properties of casting investment materials, Composition, Setting reactions, properties and Expansions of Gypsum-bonded, Phosphate-bonded, and Silica-bonded investments.
Metal and alloys	To study and understand metallic state, Cast alloys, Wrought alloys, Noble Metals, Casting Gold Alloys: composition and types, Classification of Dental Casting Alloys, Metal-Ceramic Alloys, Types, Physical properties of some modern noble alloys, Nickel chromium, Titanium alloys, Cobalt chromium and Stainless steel alloys types, application and properties.
Procedures of casting	To know the Procedures of casting, techniques for compensation of casting shrinkage, wax pattern, sprue former, reservoir, casting ring liners, burnout procedure, casting machines, casting procedures and casting defects.
Abrasives & Polishing materials	To study and know the Definitions, comparison between abrasion and polishing, purpose of polishing, desirable qualities of an abrasive agent, presentation of various abrasive and polishing agents, electrolytic polishing. Dentifrices; function and composition, Rule of fluoride and reaction of fluoride with enamel.
Temporary Crowns and Bridges Materials	To understand various Temporary Crown and Bridge Materials; Functions, requirements, types and properties of

	different temporary crown & bridges materials.
Dental Porcelains	To understand various Temporary Crown and Bridge Materials; Functions, requirements, types and properties of different temporary crown & bridges materials.
Restorative Dental Materials	To Know the aesthetic restorative materials, definition, indications, composition of Composite resins, chemical activation, light activations of composite resins polymerization shrinkage, Classification and properties of different types of resin-based composite, Manipulation of composite resins, Acid-etching and bonding procedures, Dentine bonding agents, Recent developments, Nano composites.
Dental Cements	To study the various types of dental cements; Uses Requirements and Classification of different types of dental cements. To study types, composition, setting reaction, manipulations, properties, biocompatibility and applications of: - Zinc oxide & eugenol cements, Zinc phosphate cement including control working and setting time, Zinc polycarboxylate cement, Glass-ionomer cements, Compomer, Compomer, Calcium hydroxide cements, cavity liners and Cavity varnishes, Gutta purcha.

## التدريب العملي:

Topics	Objectives
Pract. 1	To identify and to know the manipulation of Dental Plasters, Dental Stone and die stone and study setting time and reaction, to study the effect of various accelerators and retarders on setting time and properties of Dental Plaster and Dental Stone.
Pract. 2	To identify and to know the manipulation of Impression Compound, Zinc Oxide Eugenol impression paste,. alginate, and agar-agar impression materials
Pract.3	To identify and to know the manipulation of various Elastomeric Impression Materials.
Pract.4	To identify various waxes used in dentistry, Pattern Waxes, Processing Waxes Impression Waxes.
Pract.5	To identify and to study, manipulation and properties physical stages of mixing of Heat-curing self-cure acrylic resins, shellac and light-curing denture base resins.
Pract.6	To study different Non-Precious Alloys used in dentistry, (stainless steel nickel chromium and cobalt chromium alloys.)
Pract.7	To study various Die Materials used in dentistry.
Pract.8	To identify and to know the manipulation different casting Investment materials, and to learn about Casting procedures
Pract.9	Presentation of various abrasive and polishing agents.
Pract.10	Presentation of different temporary crown & bridge materials
Pract.11	To identify and to know the manipulation of porcelains.
Pract.12	To identify and to know the manipulation of Dental Amalgam types, mode of supply and proportioning.

Pract.13	To identify and to study the mode of supply and to know the manipulation of different types of Composite Resins.
Pract.14	To identify and to study the mode of supply and to know the manipulation of various types of dental cements
Pract.15	To identify and to study the mode of supply and to know the manipulation of cavity liners, cavity varnishes and gutta purcha

### طرق التدريس:

1. المحاضرات.
2. المعامل.
3. حلقات النقاش.

Topics 19, Hours 53

Spread over a period of ONE Academic year.

Each lecture will highlight the important and recent development of the concerned topic.

PRACTICAL 15, Hours 30

Spread over a period of ONE academic year.

This involves teaching the students how to identify, and to know the methods of manipulation.

### TUTORIALS

Tutorials are held in small groups in order to facilitate better understanding of the subject.

These may conducted as part of practical hours.

### تقييم الطلاب:

1. امتحان جزئي ( 30 درجة)
2. امتحان نهائي ( نظري 50, شفوي 20)
3. امتحان الدور الثاني (100)

**Student assessment methods:**

**1. Internal Assessment Marks total out of [30] marks**

**2. Final Examination**

Final Written Examination out of 50 marks

Final Oral Examination out of 20 marks

Thus the evaluation of student will be out of TOTAL [100 MARKS]

**3. Reset Examination**

Reset Written Examination out of 70 marks

Reset Oral Examination out of 30 marks

**Removable Prosthodontics (second year)**

**السنة الثانية تركيبات متحركة**

**المحاضرات والعملية:**

NO.	Topics of complete prosthodontics
1.	Introduction to Complete Denture Prosthodontics and Terminologies.
2.	Anatomical Landmarks of Edentulous Foundations.
3.	Preliminary Impressions.
4.	Custom Trays (special trays)
5.	Secondary (Final ) Impression :
6.	Temporary Record Bases and Occlusion Rims:
7.	Mandibular Movements.
8.	Articulators and Facebow.
9.	Transfer of Jaw Relation Record.
10.	Occlusion: Balanced Occlusion.
11.	Selection and Arrangement of Teeth.
12.	Reproducing Tissue Morphology, Wax-Contouring. (festooning)
13.	Flasking ,Packing ,and Processing of Dentures
14.	Dimensional Changes due to Processing , Laboratory Remounting .
15.	Recovery of Dentures, Finishing of The Contours of Dentures and

	Polishing of Dentures ,Processing Errors
16.	Repair of Dentures
No.	Topics Removable Partial Prosthodontics
17.	Introduction To Removable Partial Prosthodontics And Terminology
18.	Classification Of Partially Edentulous Arches
19.	Dental Cast Surveyor
20.	Components Parts of Removable Partial Dentures
21.	Direct Retainers; Parts /Function /Types
22.	Major and minor connector
23.	Indirect Retainers /Stress Breakers
	Laboratory Procedures
24.	Block out ,Duplicating Master Casts/Refractory Casts
25.	Waxing – Up And Spruing Procedures
26.	Investing ; Burn-Out And Casting Procedures
27.	Recovery Of Metal Frameworks, Finishing And Polishing
28.	Attachment Of Artificial Teeth To Metallic Bases
29.	Flasking , Packing Procedures, And Recovery ,Polishing Of RPD

### طرق التدريس:

1. المحاضرات المنهجية باستخدام الصور والحالات للنوضح.

2. المعامل.

✓ Lectures –illustrated with cases, photos, and diagrams.

✓ Practical sessions (direct contact between the students and their demonstrators and staff members).

### تقييم الطلاب:

1. امتحان جزئي ( 30 درجة)

2. امتحان نهائي ( نظري 30, عملي 30 شفوي 10)

3. امتحان الدور الثاني (100)

### Student assessment methods:

1. Internal Assessment Marks total out of [30] marks

## **2. Final Examination**

Final Written Examination out of 30 marks and practical exam 30

Final Oral Examination out of 10 marks

Thus the evaluation of student will be out of TOTAL [100 MARKS]

## **3. Reset Examination**

Reset Written Examination out of 70 marks

Reset Oral Examination out of 30 marks



## Removable prosthodontics (third year)

### السنة الثالثة الاستعاضة الصناعية المتحركة

#### المحاضرات والعملية:

No	Topics of complete prosthodontics
1	Examination; diagnosis and treatment of completely edentulous patients.
2	Oral environment of complete denture patient.
3	Local and systemic conditions affecting oral tissues.
4	Patient education relating to complete dentures
5	Preparation of oral tissues to receive complete denture
6	Cross –infection control in prosthodontics
7	Impression procedures:
8	Retention and stability in complete dentures
9	Jaw relation records
10	Selection and arrangement of teeth including that for atypical situations.
11	Occlusion in complete denture
12	Try-in procedure and verification of jaw relation records
13	Remounting Procedure And Insertion Of Dentures
14	Diagnosis and treatment of problems associated with the use of dentures

#### العملية:

week	Topics	Objectives
1	First appointment	Examination, diagnosis, and treatment planning for totally edentulous patients.
2	Second appointment	Impression procedures
3	Third appointment	Final impression

4	Fourth appointment	Jaw relation and Selection of the teeth
5	Fifth appointment	Try-in procedure and verification of jaw relation records
6	Sixth appointment	Remounting Procedure And Insertion
7	Seventh appointment	Follow up

### طرق التدريس:

1. المحاضرات المنهجية باستخدام الصور والحالات للتوضيح.

2. المعامل.

3. التدريب السريري.

- ✓ Lectures –illustrated with cases, photos, and diagrams.
- ✓ Practical sessions (direct contact between the students and their demonstrators and staff members).

### تقييم الطلاب:

امتحان جزئي ( 30 درجة ) لأنها سنة تكميلية.

- ✓ Assessment exam
- ✓ Written exam in the form of MCQ and short notes

## Removable prosthodontics (forth year)

السنة الرابعة الاستعاضة الصناعية المتحركة

### المحاضرات والعملية:

No.	TOPICE ``
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1	Examination, diagnosis and treatment planning for partially edentulous patients, primary impressions and diagnostic casts
2	Indications and contraindications of RPDs including advantages and disadvantages.
3	Surveying procedure.
4	Principles of partial denture designing including designing: a) clasps , b)major and minor connectors , c) rests.
5	Factors influencing the magnitude of stresses on abutment teeth.
6	1. Management of Kennedy class 1 and class 2 2. Functional impression procedures, altered cast technique. 3. stress- breaking device and precision attachments.
7	Management of Kennedy class 3 and class 4.
8	Mouth preparation for RPD.
9	Modifications of tooth contours.
10	Final impressions for removable partial denture.
11	Designing the work authorization and instructions to the technicians.
12	Try-in of metal framework, inter-maxillary relations (jaw relations) for RPD.
13	Selection and arrangement of artificial teeth; & try-in of the waxed - up partial dentures.
14	Insertion of partial denture, advice to a partial denture patient, adjustment, and follow-up procedures.
15	Repair of removable partial dentures and addition of clasps.
16	Harmful effects of RPD.
17	Special unconventional R. P. D..
18	Dental implants.

19	Complete removable overdentures.
20	Implant aided removable partial dentures.
21	Maxillofacial prosthesis.
22	Dental geriatrics.
23	Temporomandibular disorders.

### العملي:

week	Topics	Objectives
1	First appointment	Examination, diagnosis, and treatment planning for partial edentulous patients.
2	Second appointment	Impression procedures
3	Third appointment	Mouth prep Final impression
4	Fourth appointment	Metal try in and Jaw relation and Selection of the teeth
5	Fifth appointment	Try-in procedure and verification of jaw relation records
6	Sixth appointment	Insertion of removable partial denture
7	Seventh appointment	Follow up

### طرق التدريس:

1. المحاضرات المنهجية باستخدام الصور والحالات للتوضيح.

2. المعامل.

3. التدريب السريري.

✓ Lectures –illustrated with cases, photos, and diagrams.

✓ Practical sessions (direct contact between the students and their demonstrators and staff members).

### تقييم الطلاب:

1. امتحان جزئي ( 30 درجة)

2. امتحان نهائي ( نظري 60, عملي 60 شفوي 20)

### **Student assessment methods:**

#### **1. Internal Assessment Marks total out of [30] marks**

#### **2. Final Examination**

Final Written Examination out of 60 marks and practical exam 60

Final Oral Examination out of 20 marks

Thus the evaluation of student will be out of TOTAL [100 MARKS]

#### **3. Reset Examination**

Reset Written Examination out of 70 marks

Reset Oral Examination out of 30 marks

### **التدريب التكميلي ( سنة الامتياز )**

- يمارس طبيب الامتياز مهامه تحت اشراف رئي القسم واعضاء هيئة التدريس.
- يلزم طبيب الامتياز بالعمل حسب الجدول المعلن في القسم.
- مدة التدريب شهر واحد فقط وفي هذه المدة يلزم باستيفاء المتطلبات التي قررها القسم .

اعداد د. مرضية علي (منسق الجودة)

اشراف رئيس القسم

د. امل الفسي