



وصف المقرر الدراسي

قسم طب الاسنان

Subjects of the 1st Year Dental College

No.	Subjects
١.	Medical Physics
٢.	Computer
٢.	Medical Chemistry
٤.	Medical Biology
٥.	Dental Anatomy
٦.	Human Rights & Democracy
٧.	English & Dental Terminology
	Total

Subjects of the 2nd Year Dental College

No.	Subjects
١.	Human Anatomy
٢.	Prosthetic Dentistry
٣.	General Histology

Σ.	Medical Physiology
ο.	Biochemistry
Ϛ.	Oral Histology & Embryology
∇.	Dental Materials

Subjects of the 3rd Year Dental College

No.	Subjects
1.	Prosthetic Dentistry
2.	Oral Surgery
3.	Microbiology
Σ.	General Pathology
ο.	Pharmacology
Ϛ.	Operative Dentistry
∇.	General Surgery
Λ.	General Medicine

Subjects of the Σth Year Dental College

No.	Subjects
1.	Periodontics
2.	Community Dentistry
3.	Orthodontics

Σ.	Oral Surgery
ο.	Operative Dentistry
Ϛ.	Oral Pathology
Υ.	Prosthetic Dentistry
Λ.	Dental Radiology

Subjects of the 6th Year Dental College

No.	Subjects
1.	Periodontics
2.	Preventive Dentistry
3.	Oral Surgery
Σ.	Prosthetic Dentistry
ο.	Operative Dentistry
Ϛ.	Orthodontics
Υ.	Paedodontics
Λ.	Oral Medicine

UNIVERSITY COLLEGE

المرحلة الرابعة

Subject : **Periodontics**

(Theory)

Topics
Terminology and Anatomy of periodontium
Histology of periodontium (gingival, periodontal ligament, Cementum alveolar bone)
Etiology of periodontal disease
Dental plaque
Dental calculus
The predisposing factors
The modifying factors
Pathogenesis of plaque associated periodontal disease
Histopathology of periodontal disease initial, early, established & Advanced
Host defense in the dentogingival area
Immune response (Immunity)
Pathogenic mechanism in gingival inflammation(direct and indirect injuries
by plaque microorganism
Inflammatory cells
Epidemiology of periodontal disease
Classification of periodontal disease
Plaque induced gingivitis
Non-plaque induced gingivitis
Chronic periodontitis
Aggressive periodontitis
NUG and NUP
Periodontal abscess
Other issues related to periodontal disease

Subject : **Periodontics**

(Clinical)

Topics
Scaling & polishing

Topics
١. Introduction to dental public health
a. definition and score
b. community dentistry
c. personal versus community health.
٢. Dental caries and periodontal diseases as a community and economic problem.
٣. Dental epidemiology and survey procedures.
a. Dental decay diagnosis measurement, indices use for primary and permanent teeth.
b. Dental decay diagnosis measurement, indices use for primary and permanent teeth.
c. Indices used for measurement of gingivitis
d. Indices used for measurement of periodontal destruction
e. Indices used for measurement of mottled enamel and fluorosis.
f. Indices used for measurement of treatment need.
g. Survey procedures (Oral Health Survey).
i. Objectives. ii. Sampling
iii. Standardization and calibration of examiners.
iv. Approval.
v. conducting the survey.
٤. Root Caries.
٥. Epidemiological Studies.
٦. Statistics.
a- Variable and graph.
b- Frequency distribution.
c- Measuring of central tendency (mean median mod).
d- Range and the standard deviation.
e- Probability and the normal distribution.
f- Sampling distribution.
g- Tests of hypothesis and significance (T-taste).
h- CHI-square test.
V- Dental health education.
a- Definition.
b- Methods of providing DHE.
c- Health education models.
d- Dental health education to school children.
Λ- Dental ancillaries personnel.

a- Definition.
b- Classification.
c- The dental team (four hand dentistry).
d. The future delivery of dental care services.
٩- Primary health care.
١٠- Planning for manpower requirements in dental public health.
a- International manpower variation.
a- Growth trends in supply of dental manpowers.
b- Productivity of dentist.
c- The utilization of dentist.
d- Policy formulation for dental health manpower planning.
f- Evaluation of dental services.
١١- Dental treatments demand and utilization.
a- Definition.
b- Assessment of treatment needs of dental caries periodontal disease orthodontic need and dental prosthetic.
c- Determination of demand.
i- Knowledge.
ii- Attitudes.
iii- Past dental experience.
iv- Availability of services.
v- Meeting the demand for care (increased demand).
vi- Factors effecting utilization of dental services.
vii- Definition.
viii- Assessment of treatment needs of dental caries periodontal disease orthodontic need and dental prosthetic.
١٢- Public dental health program for
a- Elderly people.
b- Handicapped.
c- School children.
d- Mobile clinic.
١٣- Forensic dentistry and professional ethics.
a- Definition. b- Determination of age, sex, blood group.
c- Lip prints. d- The edentulous remains.
e- Radiology records photographic records. f- Bite mark.
g- Racial and familial dental characteristic. h-Ethics.
١٤- Laser in Dentistry.
١٥- Fluoride and fissure sealent .
١٦- Approaches in Conservative Dentistry .
١٧-Traditional versus New Methods in Cavies Dignosis .

Subject : Community Dentistry

(Practical)

Topics
١. Numbering of Teeth
a. Zsigmondy and Palmer System.
b. American Dental Association System (ADA System).
c. Two Digit System (FDI System).
٢. Diagnosis of Caries
٣. Indices of Dental Caries
a. DMF Index of Klein and Palmer.
b. def Index of Gruebbel.
c. dmf Index of Jackson.
٤. Periodontal Indices
a. Oral Hygiene Index (Greene and Vermillion).
b. Oral Hygiene Index Simplified (Greene and Vermillion).
c. Patient's Hygiene Performance Index (Podshadley and Hale).
d. Plaque Index (Löe and Silness).
e. Gingival Index (Löe and Silness).
f. Ramfjord Periodontal Disease Indices:
g. Ramfjord Calculus Index.
h. Ramfjord Gingival Sulcus Measurement Index.
i. Ramfjord Index for Pocket Depth.
J. Ramfjord Index for Mobility of Teeth.
k. Community Periodontal Index of Treatment Needs (CPITN)
٥. Root Caries Indices
٦. Seminar in community Dentistry (second semester)

Subject : **Orthodontics**

(Theory)

Topics
Introduction to orthodontics
a. Definition of orthodontics
b. Normal occlusion versus malocclusion.
c. Important definitions in orthodontics
Etiology of malocclusion
a. major factor
b. minor factor

Removable appliances

- Indications.
- Advantages.
- Disadvantages.
- Components.
- Wire components(active, passive)
- Base plate (types, indications, uses.. etc.)
- elastics.
- Screws

Biomechanics of tooth movements.

- Theories.
- Changes occur during orthodontic movement at pressure, tension sites.
- Changes occur during retention period.
- Magnitude of applied force for different tooth movements.

Anchorage in orthodontics.

- Definition.
- indications.
- Types.

Growth and development of cranio-mandibular structures.

- Theories
- Prenatal and postnatal growth and development of cranium and calvaria.
- Prenatal and postnatal growth and development of maxilla.
- Prenatal and postnatal growth and development of mandible.

Development of dental occlusion.

Extra oral appliance .

Fixed orthodontic appliances.

- Types.
- Components.
- Indications.
- Advantages and disadvantages.
- Bonding and banding.

Myofunctional appliances.

- History.
- Types.
- Indications.

New concepts in orthodontics.
 a- Laser in orthodontics.
 ١. Definition.
 ٢. Indications.
 Advantages and disadvantages.
 B- Implants in orthodontics.
 ١. Definition.
 ٢. Indications.
 ٣. Advantages and disadvantages.

Subject : **Orthodontics** (Practical)

Topics
A- Wires (Spring constructions).
١. Finger spring.
٢. Modified Finger spring.
٣. Z-spring.
٤. Double Z-spring.
٥. T-spring.
٦. Canine retractor.
٧. Modified canine retractor.
٨. Adam's clasp.
٩. Fitted labial arch.
١٠. Hawely labial arch.
١١. Robbert retractor.
B- Base plate construction.
C. Seminars.

Subject : **Oral Surgery** (Theory)

Topics
Dental management of medically compromised patients.
Infective endocarditis, Rheumatic fever & Congenital heart diseases.
Cardiac arrhythmia & Congestive heart failure
Hypertension and ischemic heart diseases

Pulmonary diseases.

Liver diseases.

Bleeding disorder.

Blood dyscrasias

Sexually transmitted diseases. and AIDS

End stage renal disease & renal dialysis.

Allergy & tissue transplant.

Oral cancer in dental patient.

Radiation & chemotherapy patients.

Rheumatoid diseases & neurological diseases

Pregnancy

Endocrine disorder

Adrenal glands and Thyroid gland.

Diabetes

Periapical surgery

Periapical microbiology & types of periapical surgery.

Flap design in periapical surgery.

Indications & contraindications of periapical surgery.

Post-operative instructions.

Impacted teeth :

Definition, causes & classification.

Lower third molar extraction.

Upper third molar extraction.

Surgical removal of teeth

Indications of surgical removal & preoperative radiograph.

Requirements of flap design.

Surgical technique.

Inflammatory bone diseases.

Dry socket (alveolar osteitis).

Acute osteomyelitis.

Chronic osteomyelitis.

Other types

Swelling of the neck

Complications of teeth extraction

During extraction.

Immediately after extraction.

Late complication.

Cyst of the jaw

Introduction & definition.

Classification.

Sign & symptoms.

Radiographic appearance.
Management.
Odontogenic infection
Microbiology of odontogenic infection
Direction of spread of odontogenic infection
Facial space infection
Management of patient with odontogenic infection
Bone graft
Conservative extraction
Dental implant

Subject : **Oral Surgery** (Theory)

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Dental management of medically compromised patients.
Infective endocarditis, Rheumatic fever& Congenital heart diseases.
Cardiac arrhythmia & Congestive heart failure
Hypertension and ischemic heart diseases
Pulmonary diseases.
Liver diseases.
Bleeding disorder.
Blood dyscrasias
Sexually transmitted diseases. and AIDS
End stage renal disease & renal dialysis.
Allergy & tissue transplant.
Oral cancer in dental patient.
Radiation & chemotherapy patients.
Rheumatoid diseases & neurological diseases
Pregnancy
Endocrine disorder
Adrenal glands and Thyroid gland.
Diabetes
Periapical surgery
Periapical microbiology & types of periapical surgery.
Flap design in periapical surgery.
Indications & contraindications of periapical surgery.
Post-operative instructions.
Impacted teeth :
Definition, causes & classification.
Lower third molar extraction.
Upper third molar extraction.

Surgical removal of teeth

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Swelling of the neck

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During extraction.

Immediately after extraction.

Late complication.

Cyst of the jaw

Introduction & definition.

Classification.

Sign & symptoms.

Radiographic appearance.

Management.

Odontogenic infection

Microbiology of odontogenic infection

Direction of spread of odontogenic infection

Facial space infection

Management of patient with odontogenic infection

Bone graft

Conservative extraction

Dental implant

Subject : **Oral Surgery** (Clinical)

Topics

Extraction cases : at least 10 per course

Subject : **Operative Dentistry** (Theory)

Topics

1-introduction to operative dentistry (History+ Dental examination

(caries, fixed appliance, periodontal, dental anomalies and defects)+Diagnosis+ treatment plane).

Υ- infection control+ sterilization.

Ϛ-Dentist position and moistural control.

Ξ- Cariology(mechanisms, current treatment options)

ο- Enamel and dentin caries

ϛ- Dentin and pulp reaction to dental caries and operative procedures

ν- Pain Control

λ- Systemic disease

ρ- Vital pulp therapy and pulp healing and Pulpotomy

ιο- Current concepts of pulp isolation

ιι- Pulp pathosis and related

ιϚ- Clinical sign and symptoms of pulp pathosis

ιϛ- Dental adhesion+ recent generations of adhesives

ιξ- Definition, and scope of endodontics.

ιο- Edodontic anatomy and pulp considerations

ιϛ- Edodontic instruments & Working length determination

ιν- Cavity preparation, Cleaning and shaping

ια- New trend in root canal cleaning & shaping

ιρ- Vitality test

ισ- Root canal filling materials

ιτ- Root canal filling techniques

Subject : **Operative Dentistry**

(Clinical)

Topics

Preclinical requirements:

1. Single canal endodontic treatment

CLINICAL REQUIREMENTS

CL.I amalgam restoration (ιο)

CL. II amalgam restoration (ο)MO+DO, (Ϛ)MOD

CL. III amalgam restoration (Ϛ)

CL. IV amalgam restoration (Ϛ)

CL. V amalgam restoration (ι amalgam restoration+ ι composite)

Subject : **Oral Pathology**

(Theory)

Topics
Introduction
Dental caries
Pulpal pathology
Periapical pathology
Dry socket
Osteomyelitis
Cysts of the jaws: Definition and Classification
Histopathology
Odontogenic tumors: Definition and Classification
Histopathology
Bone diseases: Definition and Classification
Histopathology
Developmental defects of oral and para-oral structures
Defects of jaws
Defects of lips and palate
Defects of tongue and other soft oral tissues
Defects of teeth
Pigmentation of oral mucosa
Connective tissue hyperplasia of oral mucosa
Vesiculobullous diseases of oral mucosa
White lesions of oral mucosa: Classification
Histopathology
Oral cancer
Salivary gland diseases: Classification
Salivary gland tumors
Biological aspect of implantology

Subject : **Oral Pathology**

(Practical)

Topics
Introduction & Dental caries
Pulpal pathology
Periapical pathology
Inflammatory diseases of bone
Cysts of the jaws
Odontogenic tumors
Bone diseases
Developmental defects
Pigmentation of oral mucosa

Connective tissue hyperplasia of oral mucosa
Vesiculobullous diseases of oral mucosa
White lesions of oral mucosa
Oral Cancer
Salivary gland diseases

Subject : **Prosthetic Dentistry** (Theory)

Topics
Diagnosis and treatment plan of complete denture.
Anatomy of denture bearing area (maxilla)
Anatomy of denture bearing area (mandible)
Myology related to complete denture
TMJ anatomy & physiology + mandibular movement
Non surgical and surgical preparation .
Impression for complete denture.
Jaw relationship.
Aesthetic consideration.
Occlusal schemes.
Trial denture.
Delivery.
Adjustment
Problem solving.
Diagnosis and treatment plan of removable partial denture.
Principles and essentials of partial denture design.
Mouth preparation.
Impression registration: Materials and procedures.
Impression materials and techniques
Support for distal extension RPD.
Occlusal relationship of RPD.
Relining , rebasing of RPD.
Repair.
Delivery, adjustment.
Post insertion complications of partial denture.

Subject : **Prosthetic Dentistry** (Clinical)

Topics
Steps of complete denture construction (clinical and pre-clinical)

Steps of partial denture construction (clinical and pre-clinical)
Post insertion care of complete denture.
Post insertion care of removable partial denture.
Repair of fractured prosthesis
Addition of teeth

Subject : **Dental Radiology** (Theory)

Topics
x-radiation, fundamental concepts of matter, X-ray machine
X-ray beam, interaction of x-ray with matter.
Film construction, size, speed, identification & storage.
Density, contrast, sharpness, factors affecting the quality.
Intra-oral radiographic techniques
principles of shadow casting, theory of parallel & bisecting angle
Latent image, developing, fixation.
Normal radiographic anatomy
Artifacts (Errors).
Viewing of the radiograph
Hazard & protection
effect on the living tissue, monitoring procedures, protection barriers
Localization techniques
Clinical approach to the radiographic interpretation.
Management's of special patient.
Intra-oral radiographic survey.
Radiotherapy.
Diagnosis of pathosis
Radiolucent lesions.
Radiopaque & mixed lesions
Digital & subtraction radiography.
Panoramic radiography
contra & indications ,advantages-indications
Sterilization in dental radiology
New imaging modalities.
imaging TC,imaging MRI
Specialized extra-oral techniques.
JMT, lateral skull, PA skull, Occipitontal and submental projections
Essential extra-oral technique
oblique lateral, sinus lateral & projections condylar lateral

Subject : **Dental radiology**

(Clinical)

Topics
intra-viewing oral/ o• cases
Extraoral demonstration radiography

