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# ORIENTATION FOR RESTORATIVE DENTISTRY LECTURES

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**WHAT IS RESTORATIVE  
DENTISTRY?**

- ▶ **Restorative dentistry** concerned with restoration of parts of the teeth that are defective as a result of disease, trauma, or abnormal development to a state of normal function, health, and esthetics.

# RESTORATIVE DENTISTRY

- ▶ Cariology
- ▶ Direct and Indirect restorative procedures
- ▶ Dental Materials
- ▶ Esthetic Dentistry















**CURRICULUM**

## CARIOLOGY-3TH SEMESTER- THEORETICAL

- ▶ **GOAL:** To teach the etiology, histopathology, progression, diagnosis and clinical findings of caries

## CARIOLOGY-3TH SEMESTER- THEORETICAL

- ▶ **CONTENT:** Etiological factors that cause caries, the effects of its formation on dental hard tissues, diagnosis of caries, non-operative caries therapies and preventive caries strategies



## CARIOLOGY-3TH SEMESTER- THEORETICAL

### ► LEARNING OUTCOMES:

- Explains the macroscopic, microscopic and molecular level mechanisms and dynamic processes related to the etiology and pathogenesis of dental caries.
- Describes the physical and biological changes in the structure of dental hard tissues in the detection and diagnosis of caries by using the caries terminology correctly.
- It conducts caries risk assessment and organizes a customized preventive program accordingly.

## DENTAL MATERIALS:3TH SEMESTER-THEORETICAL

- ▶ **GOAL:**To teach the general and specific properties of dental materials to ensure correct selection and use

## DENTAL MATERIALS:3TH SEMESTER-THEORETICAL

- ▶ **CONTENT:** Knowledge of general and specific properties, structure, classification of dental materials



## DENTAL MATERIALS:3TH SEMESTER-THEORETICAL

### ► LEARNING OUTCOMES:

- Defines the physical, mechanical, biological, chemical and rheological properties of dental materials.
- Chooses dental materials suitable for clinical applications.

## OPERATIVE PROCEDURES IN CARIES MANAGEMENT:4TH SEMESTER-THEORETICAL/PRACTICAL

- ▶ **GOAL:**To provide basic pre-clinical knowledge and skills required for operative caries treatments

## OPERATIVE PROCEDURES IN CARIES MANAGEMENT: 4TH SEMESTER–THEORETICAL/PRACTICAL

- ▶ **CONTENT:** Instruments used in cavity preparation and restoration, traditional and modern cavity preparation designs, caries removal techniques, cavity designs prepared for anterior and posterior adhesive restorations, and biomaterials used for pulp preservation



# OPERATIVE PROCEDURES IN CARIES MANAGEMENT: 4TH SEMESTER–THEORETICAL/PRACTICAL

### ► LEARNING OUTCOMES:

- Knows the principles of cavity preparation and all instruments used in restorative procedures for traditional, modern and adhesive restorations.
- Defines traditional and minimally invasive caries removal techniques and their differences.
- Knows the biomaterials used for pulp preservation (liner / base), which is the final stage of cavity preparation, the action mechanisms and the intentions to use of these biomaterials.
- Preparing different cavity types on simulation models and / or models, applying liner and base

## DIRECT RESTORATIVE PROCEDURES:5TH SEMESTER-THEORETICAL/PRACTICAL

- ▶ **GOAL:**To teach basic clinical knowledge and skills in the selection and manipulation of direct restorative materials, including their physical, biological, mechanical and chemical properties.



## DIRECT RESTORATIVE PROCEDURES:5TH SEMESTER-THEORETICAL/PRACTICAL

- ▶ **CONTENT:** Physical, chemical, and mechanical properties of direct restorative materials and manipulation strategies in preclinical conditions



## DIRECT RESTORATIVE PROCEDURES:5TH SEMESTER-THEORETICAL/PRACTICAL

### ► LEARNING OUTCOMES:

- To use the knowledge about dental amalgam in preclinical applications and professional life by choosing the right type and indication.
- Choosing the right type of adhesive system to be used in specific clinical situations.
- To know the components, classifications, indications and clinical applications of glass, hybrid ionomers and composites.
- Restores, finishes and polishes traditional and modern cavity preparations of different types prepared on simulation models and / or models by providing appropriate anatomy and occlusion with amalgam and / or composite.

## ADVANCED PROCEDURES IN RESTORATIVE DENTISTRY:4TH GRADE-THEORETICAL/CLINICAL

- ▶ **GOAL:**To teach the science and art of dental aesthetics together with advanced restorative procedures

### ADVANCED PROCEDURES IN RESTORATIVE DENTISTRY:4TH GRADE-THEORETICAL/CLINICAL

- ▶ **CONTENT:** Etiology and restorative approaches of carious lesions, direct and indirect restoration strategies in teeth with excessive material loss, long-term management of restored teeth, laser applications in restorative dentistry, dental anomalies, direct and indirect composite veneer application techniques, biocompatibility of direct restorative materials, color properties, basic issues and materials required to provide excellent aesthetics for the patient, including shade selection, minimally invasive approaches in restorative dentistry, biomimetic techniques and current advances in restorative dentistry



# ADVANCED PROCEDURES IN RESTORATIVE DENTISTRY: 4TH GRADE-THEORETICAL/CLINICAL

### ► LEARNING OUTCOMES:

- Knows invasive and minimally invasive aesthetic applications with direct restorative materials and bleaching agents
- Knows minimally invasive approaches, biomimetic techniques and laser applications in restorative dentistry
- Knows dental hard tissue anomalies and restorative approaches in anomalies
- Knows biocompatibility, toxicity, systemic toxicity, local reactions and allergic reactions for all dental materials.
- Diagnoses according to the signs and symptoms of diseases / conditions, plans treatment and applies the appropriate material specific to the case and applies it correctly.

## INTEGRATED CLINICAL PRACTICE : 5TH GRADE-CLINICAL

### ► GOAL:

- Students to successfully perform independent dental procedures, increase patient satisfaction from dental treatments, and manage patient conflicts.

## INTEGRATED CLINICAL PRACTICE : 5TH GRADE-CLINICAL

### ► CONTENT:

- Dental treatment skills performed with a number of patients, grouped by varying degrees and difficulties in an integrated clinical environment.

# INTEGRATED CLINICAL PRACTICE : 5TH GRADE-CLINICAL

### ► LEARNING OUTCOMES:

- To use the knowledge about dental amalgam in preclinical applications and professional life by choosing the right type and indication.
- Evaluate treatment planning with regard to patient satisfaction
- Makes treatment planning with a holistic perspective and a multidisciplinary approach
- Performs simple and complex dental applications within the limits of its competence.
- Makes accurate mouth preparations for the restorative procedures with exact sequence and exact criteria.
- Successfully manages the dentist-patient relationships to increase patient satisfaction and treatment benefits.

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## NEXT WEEK

- ▶ <https://ekampus.ankara.edu.tr/>
- ▶ DNT2005-A
- ▶ Syllabus
- ▶ Lecture notes
- ▶ Please review the lecture notes before coming to the lecture.



**SEE YOU NEXT WEEK**