

FCPS CURRICULUM OPERATIVE DENTISTRY & ENDODONTICS

The syllabus for advance phase (FCPS-II) in Operative Dentistry and Endodontics includes indirect restorations, dental implants, medico-legal and ethical implications and recent developments in the specialty through journal updates as well as topics that require more complex level of problem solving.

OPERATIVE DENTISTRY

- Clinical significance of dental anatomy, histology and physiology of enamel, dentin, pulp and cementum as well as the supporting tissues of bone and gingiva.
- Importance of dental occlusion in Operative Dentistry
- Dental caries
- Patient evaluation, examination, diagnosis and problem oriented treatment planning
- Esthetic considerations in diagnosis & treatment planning
- Sterilization and cross infection control
- Pain control in Operative Dentistry and Endodontics
- Dental biomaterials
- Physical, mechanical and optical properties of dental Materials
- Zinc oxide eugenol
- Calcium hydroxide
- Zinc phosphate
- Polycarboxylate cement
- Glass ionomer cements
- Resin-modified glass ionomer (RMGI) cements
- Calcium silicate based cements
- Bioceramics
- Dental ceramics
- Silver amalgam
- Composite resins

- Classification, ideal properties and manipulation of Impression materials
- Instruments and equipment for tooth preparation
- Preliminary considerations for Operative Dentistry
- Dentin hypersensitivity
- Periodontal restorative-interrelationship
- Fundamental of tooth preparation and pulp protection
- Clinical technique for amalgam restorations
- Complex amalgam restorations
- Fundamental concept of enamel and dentin adhesion
- Direct anterior restorations
- Direct posterior rsthetic restorations
- Aesthetic dentistry
- Diagnosis and treatment of root caries
- Natural tooth bleaching
- Porcelain veneers
- Anterior ceramic veneers
- Esthetic inlay and onlays
- Non carious lesions and their management
- Digital dentistry in Operative Dentistry
- Lasers in Operative Dentistry
- Class-II cast metal restorations
- Direct gold restorations
- Resin-bonded splints and bridges

ENDODONTICS

- Structure and functions of the dentin-pulp complex
- Microbiology of endodontic infections
- Pathobiology of apical periodontitis
- Comprehensive diagnosis and treatment planning
- Prevention of dental disease
- Sedation, local and general anesthesia

- Dental radiography and radiographic interpretation
- Pharmacology and therapeutics
- Management of medically/clinically compromised patients
- Communication, interpersonal skills and team leadership
- Pulp reactions to caries and dental procedure
- Diagnosis and management of pulpal periapical disease
- Diagnosis and management of orofacial pain, psychogenic pain and TMD
- Lesions that mimic endodontic pathosis
- Diagnosis and management of dento-alveolar infections and sequelae
- Diagnosis and management of endo-perio lesions
- Teeth morphology, anatomy, pulp morphology, and morphological anomalies
- Isolation, access preparation and working length determination
- Cleaning and shaping of the root canal system
- Obturation of the cleaned and shaped root canal system
- Bleaching procedures
- Assessment and management of teeth which have previously undergone endodontic treatment
- Surgical endodontics
- Management of traumatic injuries to teeth
- Regenerative endodontics
- Vital pulp therapy
- Root resorption
- Management of endodontic emergencies
- Managing iatrogenic events
- Chronic cracks and fractures
- Endodontic records and legal responsibilities
- Key principles of endodontic practice management

- Systemic health considerations in the endodontic patient and geriatric endodontics
- Lasers in endodontics.
- Magnification in endodontics
- Evidence-based endodontics
- Review and maintenance procedures
- Endodontic and periodontal interrelationships
- The orthodontic/endodontic interface
- Restoration of endodontically treated teeth
- Techniques of case documentation
- Evaluation of treatment outcomes

PAEDODONTICS

- Craniofacial growth and development
- Introduction to dental office
- History, examination, risk assessment & treatment planning
- Safeguarding children
- Management of pain and anxiety
- Local anesthesia for children
- Diagnosis and prevention of dental caries
- Treatment of dental caries in the preschool child
- Operative treatment of dental caries in the primary Dentition
- Operative treatment of dental caries in the young permanent dentition
- Advanced restorative dentistry
- Traumatic injuries to the teeth
- Anomalies of tooth formation and eruption
- Extraction in the primary dentition
- Space maintenance in the primary dentition
- Management of congenitally missing lateral incisor
- Enforced extraction of first permanent molars
- Retained primary teeth

- Infra-occluded primary teeth
- Management of medically compromised children

INDIRECT RESTORATIONS

- History taking and clinical examination
- Treatment planning
- Principles of occlusion
- Periodontal considerations
- Mouth preparations
- Principles of tooth preparation
- Principles of bridge design
- Complete cast crown, metal ceramic and all ceramic preparation
- Partial veneer crowns, inlay and onlay preparations
- Implant supported fixed prosthesis
- Tissue management and impression making
- Interim fixed restorations
- Evaluation, luting agents and cementation procedures
- Postoperative care

DENTAL IMPLANTS

- Theory and clinical practice of dental implants

SUGGESTED LEARNING RESOURCES

Text Books

- Sturdevant's Art and Science of Operative Dentistry
- Summit's Fundamental of Operative Dentistry
- Endodontics Principles and Practice by Mahmoud Torabinejad
- Cohen's Pathways of the Pulp
- Problem solving in Endodontics by James L. Guttman
- Paediatric Dentistry by Richard Welbury
- Contemporary Fixed Prosthodontics by Rosenstiel
- Palmer's Implants in Clinical Dentistry

- Reader, Nusstein, Drum: Successful local anesthesia for restorative dentistry and endodontics
- Little and Falace: Dental management of medically compromised patients.

Reference Books

- Ingle's Endodontics
- Paediatric dentistry Infancy through adolescence by Arthur J. Nowak
- Fundamental of fixed Prosthodontics by Herbert T. Shillingburg
- Misch's contemporary implant dentistry
- Carranza's Clinical Periodontology
- Phillips' Science of Dental Materials.
- Dental Caries: The Disease and its Clinical Management. by Ole Fejerskov, Bente Nyvad and Edwina Kidd.
- Kim and Kratchman: Microsurgery in endodontics.
- Hand book of local anesthesia by Stanley F. Malamed
- Essentials of Dental Radiography & Radiology by Frickwhaites
- Odell's Clinical problem solving in dentistry
- Clinical Problem Solving in Orthodontics and Paediatric Dentistry by Declan
- Millett
- Any other relevant books

Journals

- Journal of Endodontics
- International endodontic Journal
- Dental Clinics of North America
- Dental Update
- Clinical series of British Dental Journal relative to Operative Dentistry and Endodontics

Note:

The journals published 3 years prior to the date of exam will be included in examinations