

# The Hebrew University of Jerusalem

Syllabus

Comprehensive Treatment of the Adult Patient - Endodontics - 5th year - 97864

Last update 14-10-2021

HU Credits: 12

<u>Degree/Cycle:</u> 2nd degree (Master)

Responsible Department: Dental Medicine

Academic year: 0

**Semester:** Yearly

<u>Teaching Languages:</u> Hebrew

Campus: Ein Karem

Course/Module Coordinator: Dr. Sharonit Sahar-Helft

<u>Coordinator Email: drsaharhelft@gmail.com</u>

Coordinator Office Hours: Tuesday 9:00-12:00

#### **Teaching Staff:**

Dr. Aviva Hornstein,

Dr. Shmuel Giladigreen,

Dr. Nurit Kot limon,

Dr. Rachel Shimon,

Dr. Patrick Jubran,

Dr. Itzhak(Tsachi) Abramovitz,

Dr. Boaz Shay,

Dr. Nihad Massarwi,

Dr. tatiana Vexler,

Dr. rita yoshpe,

Dr. Sarit Rozenfled,

Dr. elisheva goldman,

Dr. amir weissman,

Dr. meir zissu

## Course/Module description:

The theoretical part of the course provides the students with in-depth knowledge regarding endo-perio diseases, apex locators, apexification, dental trauma, root resorptions, endodontic microbiology, phrmacology of intra-canal medicaments and irrigation, root canal retreatment, endodontic microsurgery, sedation, preoperative assessment, mechanisms of sedative and narcotic drugs. In addition, students must be knowledgeable of previously learned subjects as crown and root morphology, clinical and radiographic diagnosis, case management, access cavity preparation, pain and anxiety management, pulp and periapical histo-pathology, cracks and fractures, root canal chemo-mechanical preparation, endodontic equipment, root canal obturation, and the textbook chapters of previous courses. The clinical course provides the student with basic clinical training of primary treatment of simple cases that are expected to be performed by an undergraduate student upon graduation. Students are trained in general and dental data collection, difficulty assessment, endodontic diagnosis, and treatment planning. Following thorough analysis of the data with an assigned instructor and case discussion, the student is allowed to start the treatment. Endodontic treatment includes anesthesia, rubber dam placement, root canal preparation using state of the art rotary instruments and root canal filling using the lateral compaction technique.

#### Course/Module aims:

To train the 5th year student to diagnose endodontic needs among patients and teach him to provide basic endodontic treatment in cases that do not require special endodontic proficiency, with special attention on organization, patient management and timely manner treatment.

<u>Learning outcomes - On successful completion of this module, students should be able to:</u>

Upon successful completion of this module, students should be able to:

- Name proper endodontic terminology to pulpal and periapical diseases
- Use diagnostic tests in order to make pulpal and periapical diagnosis
- Explain the cellular basis for pulpal and periapical disease
- · Recognize the anatomy and physiology of the pulp and periapical tissues
- Diagnose and treat endodontic emergencies
- Prescribe analgesic and antibiotic medications used in endodontics
- Diagnose and treat perio-endo lesions, internal and external resorption, cracks and fractures of teeth
- Differentiate, diagnose and treat traumatic injuries
- Interpret radiographic patterns of endodontic disease
- Integrate new technologies in the practice of endodontics

## Attendance requirements(%):

100%

Teaching arrangement and method of instruction: Lectures are provided by the department staff and uploaded to the course site. The clinical teaching in the integrative clinic is provided by seniors and post-graduate students from the residency program. The instructors:students ratio is 1:4 at least one senior endodontist is present during each teaching session.

#### Course/Module Content:

Students will perform endodontic treatment of 1 extracted molar tooth and 2 extracted single rooted teeth. Students will perform at least one endodontic treatment of at a patient at the students' clinics.

Students will learn the theoretic basis of the following subjects: endo-perio diseases, vital and non-vital bleaching, apex locators, apexification, dental trauma, root resorptions, endodontic microbiology, intra-canal medicaments and irrigation, root canal retreatment, endodontic microsurgery, sedation, preoperative assessment, mechanisms of sedative and narcotic drugs.

## Required Reading:

textbook: Cohen's Pathways of the pulp 11th edition.

The following chapters are mandatory: 1. Diagnosis 2. Radiographic interpretation,

- 3. Case selection and treatment planning 4. Tooth morphology isolation and access,
- 5. Cleaning and shaping of the root canal system, 6. Obturation of the cleaned and shaped root canal system, 7. Structure and function of the dentin pulp complex 9. Microbiology of endodontic infections, 10. Root resorptions, 11. Management of endodontic emergencies, 12. The role of endodontics after dental traumatic injuries,

#### 13. Cracks and fractures.

## Additional Reading Material:

None

## Course/Module evaluation:

End of year written/oral examination 35 %
Presentation 0 %
Participation in Tutorials 0 %
Project work 0 %
Assignments 0 %
Reports 25 %
Research project 0 %
Quizzes 0 %
Other 40 %
clinical work and faculty evaluation

#### Additional information:

Each student must pass an oral exam (diagnosis and theoretical basis of the endodontic treatment). At least 20 clinical points are needed in order to take the exam as described in the course book.

Final grade will be composed of:

35% theoretical exam

40% clinical work and faculty evaluation

25% case evaluation

a minimal 65 point grade is needed in each of the above.

There will be a full lectures day on October 11th 2020 with lectures of previously learned subjects. The rest of the lectures are online.