



# *The Hebrew University of Jerusalem*

## *Syllabus*

### *Dental Morphology - 97615*

*Last update 02-02-2020*

*HU Credits: 5*

*Degree/Cycle: 1st degree (Bachelor)*

*Responsible Department: Dental Medicine*

*Academic year: 0*

*Semester: 2nd Semester*

*Teaching Languages: Hebrew*

*Campus: Ein Karem*

*Course/Module Coordinator: Prof. Aharon Palmon*

*Coordinator Email: [apalmon@cc.huji.ac.il](mailto:apalmon@cc.huji.ac.il)*

*Coordinator Office Hours: coordinated upon request*

*Teaching Staff:*

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Prof Aaron Palmon

Course/Module description:

*This is a first introductory course to dental medicine that includes both theoretical part and workshops. The theoretical part includes description of the morphology, structure, function, development and basic pathological conditions of permanent and deciduous teeth. It also describes soft tissues and bone of the oral cavity and basic biochemistry of collagen protein.*

*In the workshops we focus on identification of isolated teeth, the differentiation between them, age assessment and the ability of “negative carve” anatomically crown of teeth.*

Course/Module aims:

*To familiarize new dental students with teeth, bone and soft tissues of the oral cavity.*

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

*Identify primary and permanent dentition based on extracted teeth, cast models and radiographs scan.*

*To be able to manually carve tooth crowns.*

*Identify the timing and cause of developmental insults in the dentition.*

*Determine the age of an individual based on teeth condition.*

*Demonstrate basic knowledge in tooth and soft tissues development structures and biochemical composition.*

*Demonstrate understanding of evolution changes in human dentition.*

*Demonstrate understanding of the relation between morphology and function in humans and in animal kingdom.*

Attendance requirements(%):

80%

Teaching arrangement and method of instruction: Lectures & Workshop

Course/Module Content:

Lectures:

1. Introduction to tooth structure
2. Permanent teeth structure

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3. Deciduous teeth structure
  4. Dental embryology I: Histodifferentiation and morphodifferentiation during tooth development
  5. Dental embryology II: Craniofacial embryonic development
  6. Development of dentition after birth
  7. Growth, development and occlusion in childhood and young adolescents
  8. Introduction to teeth radiology
  9. Introduction to Dental pathology
  10. Oral cavity soft tissues and bone
  11. Collagen biochemistry I
  12. Collagen biochemistry II
  13. Human dental evolution and comparative anatomy

*Workshop:*

- 1-8. Identification of isolated teeth (permanent and primary)
- 2,4,5. Teeth tracing and drawing
- 3-8. Teeth carving (7 permanent teeth)
- 6-8. Identification of teeth from models and age determination
- 6-8. Identification of teeth on radiographs scan
9. Identification exam
10. Carving simulation A
11. Carving simulation B
12. Carving Test

*Required Reading:*

1. Main course book- Jordan, R.E. 1992. *Dental Anatomy and Occlusion: Study of the Masticatory System*. St. Lewis: Mosby-Yearbook, 2nd ed.
2. Woelfel, J.B. 1990. *Dental Anatomy: Its Relevance to Dentistry*. Lea and Febiger Philadelphia, 4th ed.
3. Wuehrmann A.H. and Manson, H. 1973 *Dental Radiology*. CV Mosby Co. pp. 295-305.
4. Kraus, B.S. 1969. *Dental Anatomy and Occlusion : a study of the masticatory system*. Baltimore: Williams & Wilkins.
5. Wheeler, R. C. 1984. *Dental Anatomy, Physiology, and Occlusion*. Philadelphia : Saunders, 6th ed.
6. Scott, J.H. 1982. *Introduction to Dental Anatomy*. Churchill Livingstone Dental Series. Edinburgh : Churchill Livingstone, 9th ed.

*Additional Reading Material:*

None

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Course/Module evaluation:

End of year written/oral examination 30 %

Presentation 0 %

Participation in Tutorials 0 %

Project work 0 %

Assignments 0 %

Reports 0 %

Research project 0 %

Quizzes 0 %

Other 70 %

see additional information

Additional information:

Final Grade:

30% -End of year written examination

40% - practical examination (carving)

20% -teeth identification test

5% - tutor's evaluation

5% - quizzes

Passing grade -70

Additional information can be found at the course site:

<http://www.md.huji.ac.il/courses/97615>