



Jordan University of Science and Technology
Faculty of Dentistry
Dental Surgery Department

DENT204 Oral Histology And Embryology - JNQF Level: 7

Second Semester 2022-2023

Course Catalog

4 Credit Hours. This is one of the courses provided by the department of oral medicine and surgery for undergraduate 2nd year dental students. The course has two components: didactic (theory) and practical components. The didactic component of the course covers major topics in the field of oral and maxillofacial histology and embryology such as odontogenesis, eruption and establishment of human dentition, development of (dental tissues, periodontium, oral mucosa, salivary glands, TMJ), structure and function of dental tissues, periodontium, oral mucosa, salivary glands, TMJ). Furthermore, during the first two weeks, students will review the basics of general embryology and explore in-in-depth the details relating to orofacial embryology that will facilitate and aid the student's understanding of the development of teeth and oral tissues at a later stage during the course. The practical session involves applying the knowledge gained in the didactic component by examining, drawing and labelling histological sections (static and virtual) related to the topic covered in the week. At the end of the course, the students are required to prepare and submit a mini team-based project reflects their understanding of an assigned subtopic in oral and maxillofacial embryology or histology.

Text Book

Title	Oral Anatomy, Histology and Embryology
Author(s)	Barry K.B Berkovitz, G.R. Holland, Bernard J. Moxham.
Edition	5th Edition
Short Name	Berkovitz
Other Information	Elsevier https://shop.elsevier.com

Course References

Short name	Book name	Author(s)	Edition	Other Information
Ten Cate's	Ten Cate's Oral Histology - Development, Structure, and Function	Antonio Nancy	8th Edition	Elsevier https://shop.elsevier.com
Anatomy for Dental Students	Anatomy For Dental Students	D. R. Johnson	2nd Edition	Oxford Medical Publication

Instructor

Name	Prof. Ashraf Shaweesh
Office Location	271
Office Hours	
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Class Schedule & Room

Section 1:
 Lecture Time: Wed : 14:00 - 15:30
 Room: مدرج الفاروق

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Early embryonic development leading to genesis of orofacial structures	Relevant chapters From Anatomy for Dental Students
Week 2	Orofacial embryology & practical class on week 1 and 2 topics (examining, drawing and labelling relevant simulated microscopic slides)	Relevant chapters From Ten Cate's, Relevant chapters From Anatomy for Dental Students
Week 3	Early stages of tooth development and overview of odontogenesis	Relevant chapters From Berkovitz
Week 4	Amelogenesis & practical class on week 3 and 4 topics (examining, drawing and labelling relevant simulated microscopic slides)	Relevant chapters From Berkovitz
Week 5	Enamel structure and practical class (examining, drawing and labelling relevant simulated microscopic slides)	Relevant chapters From Berkovitz
Week 6	Dentinogenesis and development of dentine-pulp complex	Relevant chapters From Berkovitz
Week 7	Dentine and Pulp structure	Relevant chapters From Berkovitz
Week 8	Revision & catch up for midterm exams & practical class on week 6 & 7 topics (examining, drawing and labelling relevant simulated microscopic slides)	

Week 9	Week of midterm exams	
Week 10	Development of root and periodontium	Relevant chapters From Berkovitz
Week 11	Structure of periodontium & practical class on week 10 & 11 topics (examining, drawing and labelling relevant simulated microscopic slides)	Relevant chapters From Berkovitz
Week 12	Oral Mucosa and practical class (examining, drawing and labelling relevant simulated microscopic slides)	Relevant chapters From Berkovitz
Week 13	Structure of salivary glands and lymphoid tissue & practical class (examining, drawing and labelling relevant simulated microscopic slides)	Relevant chapters From Berkovitz
Week 14	Structure of temporomandibular joint and other joint in the craniofacial complex and practical class (examining, drawing and labelling relevant simulated microscopic slides)	Relevant chapters From Berkovitz
Week 15	Revision & catch up for final exam materials	
Week 16	Final Exam period	

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Describe the major events that take place during early embryonic development that lead to genesis of orofacial structures [41.2 Scientific Knowledge and Cognitive Skills] [1L7K1]	4%	Midterm Exam, Final Exam
Describe how the jaws and orofacial structures (including salivary glands and TMJ) develop and interact during embryogenesis [41.2 Scientific Knowledge and Cognitive Skills] [1L7K1]	4%	Midterm Exam, Final Exam
Recognize in depth the different stages of odontogenesis including development and interaction of enamel, dentine-pulp system and periodontium tissues [161.2 Scientific Knowledge and Cognitive Skills] [1L7K1]	16%	Midterm Exam, Final Exam
To describe in depth the basic histologic structures of dental, oral and relevant extraoral tissues [221.2 Scientific Knowledge and Cognitive Skills] [1L7K1]	22%	Midterm Exam, Final Exam
Recognize the clinical applications of studying oral and maxillofacial development and histology [41.2 Scientific Knowledge and Cognitive Skills] [1L7K1]	4%	Midterm Exam, Final Exam
Demonstrate understanding the basic histology of orofacial and tooth development through examining, drawing and labelling relevant histological slides [201.2 Scientific Knowledge and Cognitive Skills] [1L7K1]	10%	Midterm Exam, Final Exam
Demonstrate understanding the basic histology of orofacial and tooth structures through examining, drawing and labelling relevant histological slides [201.2 Scientific Knowledge and Cognitive Skills] [1L7K1]	10%	Midterm Exam, Final Exam
Demonstrate understanding a subtopic in oral embryology and histology through completing and submitting a mini team-based project [103.5 Responsibility, Communication, Professionalism and Ethics] [1L7S2, 1L7C2]	10%	Final Exam

Relationship to Program Student Outcomes (Out of 100%)													
1.1 Scientific Knowledge and Cognitive Skills	1.2 Scientific Knowledge and Cognitive Skills	1.3 Scientific Knowledge and Cognitive Skills	1.4 Scientific Knowledge and Cognitive Skills	1.5 Scientific Knowledge and Cognitive Skills	1.6 Scientific Knowledge and Cognitive Skills	1.7 Scientific Knowledge and Cognitive Skills	2.1 Person-Centred Care	2.2 Person-Centred Care	2.3 Person-Centred Care	2.4 Person-Centred Care	3.1 Responsibility, Communication, Professionalism and Ethics	3.2 Responsibility, Communication, Professionalism and Ethics	3.3 Responsibility, Communication, Professionalism and Ethics
	70												

Relationship to NQF Outcomes (Out of 100%)		
L7K1	L7S2	L7C2
70	5	5

Evaluation	
Assessment Tool	Weight
Midterm Exam	40%
Final Exam	60%

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