



Course E-Syllabus

	Course title	Dental Radiology 1 (Theory)		
1		Online course		
2	Course number	1301353		
2	Credit hours	One hour theory		
3	Contact hours (theory, practical)	One hour/week theory		
4	Prerequisites/corequisites	None		
5	Program title	Doctor of Dental Surgery (DDS)		
6	Program code	NA		
7	Awarding institution	The University of Jordan		
8	School	Faculty of Dentistry		
9	Department	Department of Oral Surgery, Oral Medicine and		
Periodontology		Bachelor		
10	Level of course	Bachelor		
11	Year of study and semester (s)	Third year, Summer semester		
12	Final Qualification	DDS		
13	Other department (s) involved in teaching the course	None		
14	Language of Instruction	English		
15	Teaching methodology	□Blended ⊠Online		
16	Electronic platform(s)	⊠Moodle ⊠Microsoft Teams □Skype □Zoom □Others		
17	Date of production/revision	June, 2020		

16. Course Coordinator:

Abeer AlHadidi		
17. Other instructors:		

18. Course Description:

The fundamentals of the production and interaction of x rays are presented. This is followed by the basics of radiation biology and radiation protection, production of the radiograph (physics, chemistry and technique), and the appearances of normal tissues and structures on the radiograph.

19. Course aims and outcomes:

A- Aims:

With the successful completion of this course, the students should be able to:

- 1. List and describe, in a simplified manner, the interaction of x rays with atoms as well as biological molecules.
- 2. Describe the production of x rays at the atomic as well as machine level.
- 3. Describe the basic principles for film bases radiology.
- 4. Describe the basic principles for Digital radiology.
- 5. Learn the basic principle of intraoral and extra oral geometry
- 6. Identify the major anatomical structures of importance for mounting and interpreting radiographs.
- 7. Discuss ways to manage radiographic procedures for patients with special needs.

B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to

. .

- 1) understand the basic physics behind x-ray production and interaction and the relation of that to radiographic quality.
- 2) understand the biological hazard of x-ray and its effect on both patients and employees in the dental office.
- 3) to employ the basic knowledge they got in implementing radiographic quality assurance protocol and trouble shoot quality issues that arise.
- 4) to employ radiation biology basic knowledge they acquired into their discussion and advice to patients and in their practice for the ALARA principle.
- 5) differentiate between anatomy and artifact in a plain radiograph
- 6) practice proper radiographic selection criteria for prescribing radiographs
- 7) appreciate the importance of basic sciences in clinical practice

20. Topic Outline and Schedule:

Number	Modules	Instructor
1	Introduction; the radiographic image	Dr. AlHadidi
2	Production of the X-Ray	Dr. AlHadidi
3	Attenuation of the X-Ray Beam	Dr. AlHadidi
4	Radiation safety and Radiation Protection	Dr. AlHadidi
5	Production of the Radiograph (Film based)	Dr. AlHadidi
6	Production of the Radiograph (Digital)	Dr. AlHadidi
7	Intra-Oral Radiography I	Dr. AlHadidi
8	Intra-Oral Radiography II	Dr. AlHadidi
9	Quality Assurance and Infection Control	Dr. AlHadidi
10	Normal Radiographic Anatomy	Dr. AlHadidi
11	Panoramic imaging	Dr. AlHadidi
12	Cephalometric and Skull Radiography	Dr. AlHadidi

13	Maxillofacial Radiography	Dr. AlHadidi	
14	Selection criteria	Dr. AlHadidi	

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

Teaching material will be Uploaded on E-learning module. Online meetings via Microsoft Teams will be held twice a week.

22. Evaluation Methods and Course Requirements:

The student will be evaluated on the basis of midterm exam, which will constitute 40% of the final mark. The final examination, which is written, constitutes 60% of the final mark.

23. Course Policies:

Online meetings attendance is obligatory. The handout and recommended textbook are not comprehensive an additional material will be covered in lectures.

Concerns or complaints should be expressed in the first instance to the course instructor. If no resolution is forthcoming then the issue should be brought to the attention of the Department Chair and if still unresolved to the Dean. Questions about the material covered in the lectures, notes on the content of the course, its teaching and assessment methods can be also sent by e-mail.

25. References:

White, S. and Pharoh, M. Oral Radiology: Principles and Interpretation. 7th edition, 2014. Mosby. E learning module of the course.

Name of Course Coordinator:Abeer AlHadidiSignature:AMH Date: -June 24th 2020
Head of curriculum committee/Department: Signature:
Head of Department: Signature:
Head of curriculum committee/Faculty: Signature:
Dean: