Faculty of Dentistry

Model (No 12)

Course Specification: Diagnosis and Oral Radiology

University: Mansoura University
Faculty: Faculty of Dentistry
Department: Oral medicine, Periodontology, Diagnosis and Oral Radiology Department

1- Course data:

Code: 404Rd Course name: Oral Radiology Study year: 3rd year

Specialization: Bachelor of Dentistry

Teaching Hours: 3 hours

Lecture: 1hr./week Practical: 2hr/week

Number of units:30

2- Course aims: -

1. Understanding the basic terminology of oral radiology
2. Make the student able to perform different oral radiology techniques
3. Enable the student to interpret ate different types of X-rays

3- Intended learning outcomes of course (ILOS): -

a. Knowledge and understanding

Graduates should be able to

a1 Recognize the basic scientific knowledge related to oral radiology including principles of physics, radiobiology, radiation protection and techniques.
a2. Identify and discuss different diagnostic modalities in oral radiology needed to diagnose the nature of different lesions.
a3. Identify the basic radiological appearances of different pathologies.
a4. State the principles upon which all the intraoral and extra oral radiographic techniques are based including panoramic and digital radiography

b. Intellectual skills

Graduates should be able to

b1. Differentiate between normal and abnormal findings in different types of dental radiographs.
b2. Correlate all the oral findings that shows in different dental films to clinical situation
b3. Assess the various radiographic images of the maxillofacial region
b4. Construct a radiological differential diagnosis of pathological lesions and be able to

write an accurate radiographic report,

b5. Select suitable advanced imaging modalities to investigate the differential diagnosis of the lesions.

c. **Professional and practical skills**

Graduates should be able to

c1. Perform a standard way for using dental x-ray machine and utilize different exposure techniques according to needed information.

c2. Working safely with radiation and apply different method of radiation protection.

c3. Interpret suitable advanced imaging modalities to investigate the differential diagnosis of the lesions

d. **General and transferable skills**

Graduates should be able to

d1. Utilize effectively different topics in oral radiology to communicate with patient easily and demonstrate their problems

d2. Realize student personal knowledge about oral radiology and be able to make seminars discussing different radiological topics.

d3. Use recent technology for data collection, analysis and for self-directed learning.

4- Course contents: -

S	Topics	Week
1	Radiation physics	1st
2	Radiobiology	2nd
3	Radiation Protection	3rd
4	Dental film	4th
5	Processing techniques	5th
6	Intra oral radiographic techniques	6,7,8th
7	Extraoral techniques	9th
8	Panoramic technique and Errors	10.11.12th
9	Periapical radiolucencies	13th
10	Periapical radioopacities	14th
11	Radiographic appearance of periodontal diseases	15th
12	Pericoronal radiolucencies	16th
13	Multilocular radiolucencies	17th
14	Digital radiology	18th
15	Special radiographic techniques	19th
16	Cone beam CT	20.21.22th

5- Teaching and learning methods:-

S	Method	Basic knowledge	Intellectual skills	Professional skills	General skills
1	Lectures	√	√	-	-
2	Demonstrations	-	√	√	√

6- Teaching and learning methods of disables:-

None

7- Student assessment:-

a. Student assessment methods

S	Method	Basic knowledge	Intellectual skills	Professional skills	General skills
1	MCQ Examinations • Ongoing assessment(MCQ) • Final examination (short essay)	√ √	√ √	-	-

b. Assessment schedule

S	Method	Week
1	Written examination • Ongoing assessment(MCQ) • Final examination (short essay	2nd week of January 4th week of May.
2	Practical examination	1st and 2nd week.of May
3	Oral examination	4th week of May.

c. Weighting of assessments

S	Method	Weight
1	Ongoing assessment	18.18%
2	Final_term examination	54.54%
3	Oral examination	18.18%
4	Practical examination	27.27%
Total		100%

8- List of references

S	Item	Type
1	White, Stuart C., and Michael J. Pharoah. Oral radiology: principles and interpretation. Elsevier Health Sciences, 2014.	Text book
2	Wood, Norman Kenyon, and Paul W. Goaz. Differential diagnosis of oral lesions. Mosby 5th edition, Elsevier Health Science, 1997.	Text book

9- Matrix of knowledge and skills of the course

S	Items	Details	Basic knowledge	Intellectual skills	Professional skills	General skills
1	Course contents	Radiation physics	a1	b2	c1	d2
		Dental film	a1	b1	c1	d2
		Radiobiology	a1		c2	
		Radiation Protection	a1		c2	
		Processing techniques	a1	b4	c1	d3
		Intra oral radiographic techniques	a 1,a4	b1,b5	c1	d2
		Extraoral techniques	a1,a4	b1,b5	c1	d2
		Panoramic technique and errors	a1,a4	b1,b5	c3	D2
		Periapical radiolucencies	a2, a3	b1,b2.b4	c3	d3
		Periapical radioopacities	a2, a3	b1,b2,b4	c3	d2
		Radiographic appearance of periodontal diseases	a2, a3	b1,b2,b4	c3	d2
		Pericoronal radiolucencies	a2, a3	b1,b2,b4	c3	d3
		Multilocular radiolucencies	a2, a3	b1,b2,b4	c3	d2
		Digital radiology	a1,a4	b1,b5	c3	d2
		Special radiographic techniques	a4	b1,b5	c3	d2
		Cone beam CT	a4	b1,b5	c3	d1

Course Coordinator(s):

1. **Dr. WaelSafwat**
2. **Dr. BassantElmowafey**
3. **Eman Shawky**

Head of department:

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