



زانکۆی پۆلیتیه کنيکی هه ولير
ERBIL POLYTECHNIC UNIVERSITY

Kurdistan Region Government
Ministry of Higher Education
and Scientific Research
Erbil Polytechnic University



**Department of Dental assistant
Erbil Medical Technical Institute
Erbil polytechnic university**

Semester 4

Module 420

Subject: ... Dental Radiology DER 420

Course Book of DER 420

Lecturer's name

Zana Abdulrashman M.Sc.

Ghalib Rahman Hamakarem M.Sc.

Academic Year: 2025/2026

Module (Course Syllabus) Catalogue

2025-2026

College/ Institute	Erbil Medical Technical Institute	
Department	Dental assistant Department	
Module Name	Dental Radiology	
Module Code	DER 420	
Degree	Technical Diploma <input checked="" type="checkbox"/> Bachler <input type="checkbox"/> High Diploma <input type="checkbox"/> Master <input type="checkbox"/> PhD <input type="checkbox"/>	
Semester	Fourth Semister	
Qualification	Assistant Lecturer Lecturer	
Scientific Title	Master of Science in Community Health Master of Science in Prosthodontic	
ECTS (Credits)	6 ECTS	
Module type	Prerequisite <input checked="" type="checkbox"/> Core <input type="checkbox"/> Assist. <input type="checkbox"/>	
Weekly hours	5	
Weekly hours (Theory)	(2)hr Class	(67)Total hrs Workload
Weekly hours (Practical)	(3)hr Class	(105)Total hrs Workload
Number of Weeks	16	
Lecturer (Theory)	12	
E-Mail & Mobile NO.	ghalib.hamakarim@epu.edu.iq dr.ghalib@yahoo.com 07507318027 07701576912	
Lecturer (Practical)		
Websites ...	https://academicstaff.epu.edu.iq/faculty/ghalib.hamakarim www.dentaldrghalib.webs.com	
Extra note	بۆ / قوتابيه خوشه ويسته كان	

Course Book

Course Description	<p>The current model is one of the basic modules in the fourth semester which is serve student to understanding the basic principal in the Radiograph (Term, Type and technique) , the module is one of the main part in dentistry duty in the dental clinic, this model serve student after he/she graduated, in the clinic</p>				
Course objectives	<p>On completion of this module the student will be learn and simple manipulate the:</p> <ul style="list-style-type: none"> • Understand and improving the basics principle of radiograph. • Correlations between dentist and patient's needs during xray taking. • Information's about dental radiograph that related to dental work. • Important of radiograph in diagnosis of dental problem. • Basic principles about xray , dental film and processing or displaying the film • X-ray hazzard and main principal in safety with minimal dangerous during x-ray manipulation 				
Student's obligation	<p>12. Student's obligation</p> <ol style="list-style-type: none"> 1-attendant 2-attention 3- quiz 4- essay 5- report 6- homework 7- seminar 				
Required Learning Materials	<p>Theory: Hall,lecture, group discussion, report, seminar, home work., data-show , video, image , model</p> <p>Practice: pre-lab, report ,seminar , homework, laboratory , visit , model , dealing with the instruments ,device and materials.</p>				
Work load and Evaluation	S	description	type	no	workload
	1	theory	F	12	24
	3	preparation	h	12	36
	4	practical	f	12	36
	5	preparation	h	12	18
	6	tutorial	f	0	0
	7	homework	h	4	6
	8	report	h	8	16
	9	seminar	h	1	3

	13	Quiz	h	4	2	
	14	Mid theory	f	1	2	
	15	Mid theo. pre.	h	1	6	
	16	Mid practice	f	1	1	
	17	Mid pract. pre.	h	1	6	
	18	Final thory	f	1	2	
	19	Final theo. pre.	h	1	6	
	20	Final practice	f	1	2	
	21	Final practic. pre.	h	1	6	
	Face to face f/12 week		5.583	Face to face f	67	
	Home h/16 week		6.563	Home hours h	105	
	Total /16 week		10.75	Total hours	172	
ECTS			5.733=6			

Activity and Evaluation value in a module	نمبرکی مان	رپورٹ %5	سپینار %5	رپورٹ و سمنار	کويز	تاقیکردنہوہ تیوری نیوہی و ہرز	تاقیکردنہوہ کرداری نیوہی و ہرز	رپورٹی تاقیطیبی و تزیشکی	چالای پؤل	کوی بیش کوتایی	تاقیکردنہوہ تیوری نیوہی و ہرز	تاقیکردنہوہ کرداری نیوہی و ہرز	کو	
	5			10	8	10	15	10	2			10	30	
										60				100

Specific learning outcome:

At the end of module DER 420 the student outcome are the following

- 1- Have basic knowledge about X-rayas a general subject.
- 2- Have basic knowledge about (dental x-ray use).
- 3- He can help the dentist in dental clinic to positioning, tking and processing.
- 4- Have ability to deal with the simple defect of patient under supervision of dentist.
- 5- Have ability to search and make short (report, essay, seminar and project) related to radiograph .

	6- Have ability to do simple clinical work related to this subjects.	
Course References:	<p>1- Medical science</p> <p>2- Australian dental terminology</p> <p>3- British dental journal</p> <p>4- Brazilian dental journal</p> <p>Digital source (web, journal, magazine , video.... Ect)</p>	
Course topics (Theory)	Week	Learning Outcome
History + student discussion	1.	History + student discussion
Definitions related to radiograph + student discussion	2.	Definitions related to radiograph + student discussion
Type of xray + student discussion	3.	Type of xray + student discussion
Intra oral x ray + student discussion	4.	Intra oral x ray + student discussion
Intra oral x ray ..cont... + student discussion	5.	Intra oral x ray ..cont... + student discussion
Extra oral x ray + student discussion	6.	Extra oral x ray + student discussion
Dental film + student discussion	7.	Dental film + student discussion
Processing of dental film + student discussion	8.	Processing of dental film + student discussion
Common error in dental xray and film + student discussion	9.	Common error in dental xray and film + student discussion
x-ray machines + student discussion	10.	x-ray machines + student discussion
Xray hazard + student discussion	11.	Xray hazard + student discussion
X ray hazard....con.... + student discussion	12.	X ray hazard....con.... + student discussion
Practical Topics	Week	Learning Outcome
History + student discussion	1	History + student discussion
Definitions related to radiograph + student discussion	2	Definitions related to radiograph + student discussion
Type of xray + student discussion	3	Type of xray + student discussion

Intra oral x ray + student discussion	4	Intra oral x ray + student discussion
Intra oral x ray ..cont... + student discussion	5	Intra oral x ray ..cont... + student discussion
Extra oral x ray + student discussion	6	Extra oral x ray + student discussion
Dental film + student discussion	7	Dental film + student discussion
Processing of dental film + student discussion	8	Processing of dental film + student discussion discussion
Common error in dental xray and film + student discussion	9	Common error in dental xray and film + student discussion
x-ray machines + student discussion	10	x-ray machines + student discussion
Xray hazard + student discussion	11	Xray hazard + student discussion
X ray hazard....con.... + student discussion	12	X ray hazard....con.... + student discussion

Questions Example Design

Discus the following :

- radiology
- dental film
- collimation
- panoramic x ray

1. digital film less hazard than classic film
2. bitewing film an extraoral type film

4- during preapical xray takink the radiations perpendiculatr on the long axis of

- 1- tooth
- 2- dental film
- 3-bisecting line between them
- 4- not of them

Extra notes:

Update the topic and clarification of it for the next year

External Evaluator

من د. سمیر احمد حمد پزیشکی دندان و پسیپوری بواری چاره سهر کردنی دندان (مامؤستای یاریده دهر) له هه مان بهش چاوم خشاندهم کوریکوله مه دا ههستم بهوه کرد که بابهته کان له کهل ناوهر ژکه کان لیکهوه نزیکن و به باشی مافی بابهته که دراوه