

Program of Study : Dentistry

Course : Dental Radiology

Abbreviation : ST1/ZAA20

Schedule : 15 hours of lectures
30 hours of exercises

Course Distribution : 3rd year , 5th semester

Number of Credits : 3

Course Form : Lectures, exercises

Lectures :

Guarantor: Doc. MUDr. Květoslava Nováková, CSc.
Teachers : MUDr. Přemysl Krejčí, Ph.D.
 Prof. MUDr. Miroslav Heřman, Ph.D.
 Doc. MUDr. Richard Pink, Ph.D.
 MUDr. Petr Michl
 Ing. Tomáš Najer
 MDDr. Matouš Kašpar

Study : Continuous, Tuesday 13.00 – 14.30 seminar room UZQ 101080

	Date	Subject	No. of Less.	Teacher
1	20.9.2022	General physical principles of x - ray radiation, the impact on human organism, the protection from radiation, the operation of x - ray office.	2,5	Nováková/Heřman
2	4.10.2022	Panoramic radiography, technique of projection, the interpretation of x- ray picture, the value for diagnostic analysis, the most frequent errors.	2,5	Nováková/Heřman
3	18.10.2022	Orthopantomography, cone beam computed tomography, technique, software.	2	Nováková/Najer
4	1.11.2022	Practical utilization of modern imaging techniques in dentistry - computed topography, magnetic resonance , sonography, radioisotope aided diagnostic.	2	Nováková/Pink

5	15.11.2022	Periapical radiography – intraoral X-ray machine, ideal positioning requirements, paralleling technique, bisected angle technique, bitewing radiography, occlusal radiography.	2	Nováková/Krejčí
6	29.11.2022	CBCT with Planmeca ProMax 3D - wide volume size selection, different imaging modes for different clinical need, examples of clinical use in practice, indications	2	Nováková/Krejčí
7	13.12.2022	Radiographic diagnosis – dental caries, diseases of dental pulp and periodontium, impacted teeth.	2	Nováková/Kašpar

Exercises :

Guarantor: Doc. MUDr. Květoslava Nováková, CSc.
Leading Teacher : MUDr. Přemysl Krejčí, Ph.D.
Study : Continuous Wednesday 10.30 – 12.00

	Teaching week from - to	Topic	Number of hours
1	21.9.2022	Practical radiation protection and operation of the X-ray department	2 Pediatric
2	28.9.2022 The state holiday	Technique of panoramic X-ray record, extraoral projection made with standard dental apparatus. Indications for extraoral radiographs.	2 Maxillofacial surgery
3	5.10.2022	Practical analysis and description of extraoral radiograph of facial skeleton (tumours, traumatic injuries and inflammatory changes, systemic diseases).	2 Maxillofacial surgery
4	12.10.2022	Computer tomographic (CT) examination, sonography (ultrasonography) and nuclear magnetic resonance (NMR) – technique of taking, interpretation and description	2 Maxillofacial surgery
5	19.10.2022	Description of panoramic X-ray record from the point of view of practical dentistry	2 Operative
6	26.10.2022	Practical training in intraoral projection techniques, film handling technique, direct digital radiography, practical use.	2 Operative
7	2.11.2022	Interpretation of X- ray pictures – description of anatomic pattern in pediatric dentistry. Deciduous and permanent teeth, dental age. Practical use.	2 Pediatric
8	9.11.2022	Interpretation of X- ray pictures, description of	2

		congenital and acquired disorders in pediatric dentistry. Practical use.	Pediatric
9	16.11.2022	Interpretation of X- ray pictures, description of pathological changes in pediatric dentistry. Practical use.	2 Orthodontics
10	23.11.2022	Interpretation of X- ray pictures, description of pathological changes in cariology.	2 Operative
11	30.11.2022	Interpretation of X- ray pictures, description of pathological changes in endodontics. Practical use.	2,5 Operative
12	7.12.2022	Interpretation of X-ray Picture, description of anatomic pattern and pathological changes in periodontology. Practical use.	2,5 Periodontology
13	14.12.2022	Interpretation of X-ray pictures in implantology. Practical use.	2,5 Periodontology
14	21.12.2022	Revision, practical use RVG each other.	2,5 Pediatric

Completed by : Credit, examination - test

Requirements : 100 percent presence at exercises, 50 percent at lectures

Continuous testing of manual operations.

Directions of dean LF – B-18/14 – It is possible to past 1/3 of obligate education, but only upon an apology.

Literature : Eric Whaites E.: Essentials Of Dental Radiography And Radiology