

No.	Title of the lectures	Hours
1	Physics of radioation(introduction and definitions of nature of radiation, type of radiation)	1
2	Production of radiation(x-ray machine, interaction of x-ray with matter) composition of matter	1
3	Film imaging (types of x-ray films, processing cycle,dark room, intensifying screen	1
4	Factors controlling x-ray beam , dosimetry and invers square law	1
5	Projection jeometry (sharpness, distortion, image characterstic and artifacts)	1
6	Biological effects of radiatin (direct & indirect effects, determistic and stochastic effect)	1
7	Safety and Protection (source of exposure , dose limits , exposure and risk and reducing dental exposure)	1
8	Intraoral projection (periapical, bitwing, and occlusal radiography)	1
9	Digital radiography (strength , limitations , comparing with conventional radiography and indications	1
10	Patient's management(mangement of pt.child, contrast media & localization technique	1
11	Cephalometric imaging (technique, indications, evaluation of the image	1
12	Panoramic radiography (principels, technique ,positin and interpretation)	1
13	Craniofacial imaging (types , indication and interpretation)	1
14	CBCT (principles, components, strength and limitations).	1
15	CBCT (clinical applications in maxillofacial region, anatomy and interpretations).	1
16	Radiographic anatomy part1 (teeth, supporting dentoalv structures, maxilla and mid facial bones)	1
17	Raddigraphic anatomy part 2(mandible, Tmj, base of skull, air way,restorative materials)	1
18	Advanced imaging modalities(CT, MRI AND ULTRASOUND)	1
19	Radiography &Implantology(modalities, indications)	1

20	Infection control(infection control in radiography clinic, protection of pt., protection of workers)	1
21	Prescibing diagnostic imaging(radiologic examination and guide lines for ordering imaging)	1
22	Radiographical interpretations of common diseases(interpretation of	1

	dental caries, and periodontal disease	
23	Cysts of the jaw(odontogenic and non odontogenic cysts)	1
24	Dental anomalies(acquired and developmental)	1
25	Inflammatory conditions of the jaws(periapical inf disease, osteomyelitis, pericoronitis)	1
26	Trauma(dento alveolar trauma , dental fractures and bone fructues	1
27	TMJ abnormalities(anatomy of TMJ, application)	1
28	Salivary gland disease (imaging modalities, interpretation)	1
29	Craniofacial anomalies (Cleft lip and palat)	1
30	Computed tomography(indications ,strength, limitations)	1
Total		30

Clinical requirements

Number	Title of clinical requirements	Hours
1	Fundamentals of radiology:component of x- ray machine and production of X-ray	2
2	X-ray film (types and indication)	2
3	Intraoral techniques(periapical, bite-wing and occlusal films)	2
4	Ideal radiograph	2
5	Land marks(maxilla, mandible)	2
6	Dental panoramic radiography(indication and anatomy)	2
7	CBCT (indication and anatomy)	2
8	Cephalometric (indication and anatomy)	2
9	Common disease (caries , PDL)	2
10	Cyst(odontogenic and nonodontogenic)	2
11	Clinical work	2
12	Clinical work	2
13	Clinical work	2
14	Clinical work	2
15	Clinical work	2
16	Clinical work	2
17	Clinical work	2
18	Clinical work	2
19	Clinical work	2
20	Clinical work	2
21	Clinical work	2
22	Clinical work	2
23	Clinical work	2
24	Clinical work	2
25	Clinical work	2
26	Clinical work	2
27	Clinical work	2
28	Clinical work	2
29	Clinical work	2

30	Clinical work	2
Total		60