

Radiologic Proficiency Course Syllabus

Name of Course:	Radiologic Proficiency Exam Training May 16-May 30, 2009 (Subject to change)
Classes:	Meet once-a-week for 8 hours for <u>three</u> consecutive weeks on Saturdays from 8AM to 5PM at 3488 Liberty Rd S, Salem, OR
Class instructor:	Darla Schiopen, CDA, EFDA, BS, FADAA Dessa Figueroa, BS Dental Hygiene, EFDA Radiology
Required study:	<u>Modern Dental Assisting</u> , Torres and Ehrlich; in-class handouts

Class Meetings

May 16, 2009

MDA: Chapter 38, pp. 580-599

Radiology: Its Foundation, Equipment, and Safe Use:

Class 1

Uses of dental radiographs; discovery of radiation, a brief history; radiation physics, a basic understanding of atomic structure, ionization, and the properties of radiation; the dental X-ray machine; dental X-ray tubehead and its parts; X-ray tube; position indicator device (PID); extension arm; control panel; X-ray production and how it happens

Types of radiation; primary, secondary, and scatter; radiographic beam; radiolucent and radiopaque characteristics; contrast; density; geometric characteristics; radiation effects; tissue damage; ionization; biologic; cumulative; acute, and chronic exposure and related disorders; genetic and somatic; critical organs; radiation measurement and safety; doses and intraoral X-rays; protective devices; patient protection; pregnancy; operator protection and monitoring; equipment monitoring; pediatric patients; ALARA concept; patient education; what to say to the patient

MDA: Chapter 39, pp. 600-617

Dental film holders and types of film; types of holders; dental film composition; latent image; film speed; intraoral film and structure of film packet; film sizes; extraoral film; packaging and cassette; intensifying screen; film types; duplicating film; film storage; film processing; the five steps; processing solutions; the darkroom and its requirements; processing tanks; automatic processor

Manual processing of dental radiographs; automatic processing of dental radiographs using daylight loader; errors and solutions involving time, temperature, chemical contamination, film handling, light exposure; legal/ethical implications

May 23

MDA: Chapter 40, pp. 618-633

Class 2

Legal Issues, Quality Assurance, and Infection Control:

Legal considerations; federal and state regulation; licensure requirements; risk management; informed consent; liability; patient records; patient refusal; patient education; quality assurance in the dental office; quality control tests; types of tests; X-ray machine quality control steps; dental X-ray machines; dental X-ray film; screens and cassettes; viewboxes; darkroom lighting; safelight test; film processing, manual and automatic; processing solutions, examples; quality administration procedures; monitoring; administrative quality control steps; maintenance; evaluation; training

Infection control; checklist for infection control in dental radiology; the radiography operator; CDC guidelines for dental radiology; contamination-prone surfaces and areas; equipment and supplies; procedures during and after X-ray film exposure; practicing infection control during film exposure; infection control steps in dental radiography; procedures during X-ray film processing; practicing infection control in the dark room; practicing infection control with use of daylight loader; legal/ethical implications

May 30

MDA: Chapter 41, pp. 634-678

Class 3

Intraoral Radiography:

X-ray techniques; paralleling; guidelines for film placement; preparing the patient for dental X-rays; assembling XCP (Extension-Cone Paralleling) instruments; producing full-mouth radiographic survey using the paralleling techniques; bisecting technique; producing a full-mouth radiographic survey using the bisecting technique; bite-wing technique; producing a four-film radiographic survey using the bite-wing technique; occlusal technique; producing maxillary and mandibular radiographs using the occlusal technique; patients with special medical needs (vision, hearing, mobility, developmental) and guidelines; patients with special dental needs (edentulous, pediatric, endodontic, gagging) and guidelines; radiographic technique errors; mounting dental radiographs and guidelines; legal/ethical implications

MDA: Chapter 42, pp. 679-701

Extraoral Digital Radiography:

Panoramic radiography and anatomy; preparing the patient for panoramic radiography; positioning the patient; advantages and disadvantages of panoramic radiography; extraoral radiography; equipment; film and intensifying screens; grid; procedures; lateral jaw radiography; skull radiography; temporomandibular joint radiography; digital radiography; basic concepts; radiation exposure; equipment; types of digital imaging; procedures; advantages and disadvantages; legal/ethical implications