Douglas College

CURRICULUM GUIDELINES

A: Division: **INSTRUCTIONAL**

B: Department/ Program Area: **HEALTH SCIENCES**

Date: **SEPTEMBER 5, 2000**

New Course [**N**] Revision [**Y**]

If Revision, Section(s) Revised: **P**

Date Last Revised: **1997 05 30**

C:	**D:**	**E:**
CHDA 107	**DENTAL RADIOLOGY THEORY**	**1.5**
Subject & Course No.	Descriptive Title	Semester Credits

F: Calendar Description:

The purpose of this course is to help the student develop an understanding of the basic principles of clinical dental radiography. Current radiographics techniques will be covered with the emphasis being on safe and effective use of x-rays in dental practice.

G: Allocation of Contact Hours to Types of Instruction/Learning Settings

Primary Methods of Instructional Delivery and/or Learning Settings:

Lecture

Number of Contact Hours: (per week / semester for each descriptor)

30 per semester

Number of Weeks per Semester:

15

H: Course Prerequisites:

NIL

I. Course Corequisites:

NIL

J. Course for which this Course is a Prerequisite:

CHDA 217

K. Maximum Class Size:

30

L: PLEASE INDICATE:

[ ] Non-Credit

[**X**] College Credit Non-Transfer

[ ] College Credit Transfer: Requested [ ] Granted [ ]

SEE BC TRANSFER GUIDE FOR TRANSFER DETAILS (www.bccat.bc.ca)

M: Course Objectives/Learning Outcomes

Objectives are based on the Provincial Competencies for Certified Dental Assistants, developed for the Ministry of Advanced Education and Job Training, 1989.

The student will be able to

1. explain x-ray generation and its use in dentistry.
2. explain the operation of radiographic equipment.
3. explain radiation hygiene.
4. outline use and care of dental x-ray films and holders.
5. explain infection control procedures in radiography.
6. explain exposure techniques.
7. process dental films.
8. mount dental films and describe landmarks.
9. discuss quality assurance.

N: Course Content

1. X-ray generation

Electromagnetic radiation
X-ray production
Beam quality
Beam quantity

2. Dental x-ray exposing equipment

Machine components
Safety features
Operation and maintenance of intra oral machines
Operation and maintenance of panoramic/cephalometric x-ray machines

3. Radiation Hygiene

Principles of attenuation
Measurement of radiation
Principles of protection
Radiation monitoring
Biological hazards

4. X-ray film and Holders

Dental radiographic films, intra oral and extra oral
Film holders
Principles of storage
Positioning of dental x-ray film

5. Infection Control

Infection control significance
Barriers

6. Exposure techniques

Exposure planning
Intra oral film placement
Bisecting angle technique
Paralleling technique
Bitewing technique
Technique modifications
Panoramic technique

7. Process Dental Films

Dark room requirements
Image formation
Processing chemicals
Manual processing
Automatic processing
Rapid processing
Storage requirements
Process dental radiographs

8. Landmarks and Mounting

Radiographic appearance
Normal landmarks
Deviations from normal
Film mounting

O: Methods of Instruction

1. Lecture
2. Class discussion/participation
3. Audio-visual materials

P: Textbooks and Materials to be Purchased by Students

* Torres, H.O., and Ehrlich, A., Bird, D. & Dietz, E., Modern Dental Assisting, (latest edition). Philadelphia: W.B. Saunders Co.

* Wilkins, E.M., Clinical Practice of the Dental Hygienist, (latest edition). Philadelphia: Lea and Febiger.

Haring, J.I. and Jansen, L., Dental Radiography Principles and Techniques (latest edition). Philadephia: W.B. Saunders Co.

*** Same texts used in all courses of Dental Assisting Program.**

Q: Means of Assessment

Course evaluation is based on course objectives, and is consistent with Douglas College Evaluation Policies. An evaluation schedule is presented to the student at the beginning of the course.

A minimum mark of 65% is required to be successful in the course.

Outlines of evaluation may be subject to change.

R: Prior Learning Assessment and Recognition: specify whether course is open for PLAR

Course Designer(s)	Education Council/Curriculum Committee Representative
Dean/Director	Registrar