

Curriculum Action Request (CAR) (Form 4-93) - Maui Community College

Date Submitted to Curriculum Committee: 10/17/01

1. a. General type of action: program x course
Alpha/No. of present course

b. Specific type of action: (check appropriate action below)

Addition:	Deletion:	Modification in:
X regular	<u>course</u>	<u>credits</u>
<u>experimental</u>	<u>from program</u>	<u>title</u>
(specify):	<u>number and/or alpha</u>	<u>prerequisites</u>
		<u>description</u>
		<u>program</u>

2. Reason for this curriculum action:
Community need for Dental Assisting

3. Existing course: NA
Alpha Number Title credits

4. a. Proposed/modified course:

DENT 176 Dental Radiology I 2
Alpha Number Title (60 positions max. spaces count) credits

b. DENTAL RAD I
Abbreviated title (16 positions max.)

c. New Course Description and/or page number in catalog of present course description, if unchanged or modified:

Discusses the production, characteristics, and biological effects of radiation, function, components, and operation of the x-ray unit. Includes radiation protection and monitoring; chemistry and techniques associated with x-ray film and developing solutions. Reviews anatomic landmarks, and introduces intraoral and long-cone radiographic techniques in bitewing, periapical, and occlusal surveys.

5. a. Prerequisites: Admission to Dental Assisting program, or consent

b. Corequisites: none

c. Recommended preparation: none

6. a. Semester Offered: fall spring fall/spring as needed na

b. Proposed semester/year of first offering: Fall semester 2002 year

c. other scheduling considerations? no yes, explain:

7. Student contact hours per week: lecture 1 hrs lab 3 hrs lecture/lab hrs
other hrs, explain: NA

9. Course grading: letter grade only credit/no credit either audit

10. Special fees required: no yes, explain:

11. Will this request require special resources (personnel, supplies, etc.)?
 no yes, explain:
dedicated classroom, Laboratory space, 1.0 FTE, Lecturers

12. a. Maximum enrollment: 24 Rationale, if applicable:
Limited lab space

b. Is this course restricted to particular room type? no yes,
explain type of room required:
Dental Laboratory

13. Course fulfill requirement for Dental Assisting program(s)

Course is elective for NA program(s)

Course is elective for AA degree NA program(s)

14. Course increase decreases makes no change
in # of credit required for the program(s) affected by this action
NA

15. Is this course cross-listed? no yes, identify course:

16. Is this course taught at another UH campus? no, specify why this
course is offered at MCC:

Support Dental Assisting Program

yes, specify campus, course, Alpha and Number:

17: a. Course is articulated at (check those that apply):

UHCC UH Manoa UH Hilo UH WO Other/PCC

b. Course is appropriate for articulation at (check those that apply):

UHCC UH Manoa UH Hilo UH WO Other/PCC

c. Course is not appropriate for articulation at (check):

UHCC UH Manoa UH Hilo UH WO Other/PCC

d. Course articulation information is attached no yes
Under investigation

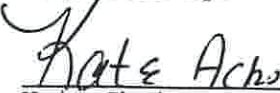
Proposed by: Nancy Johnson

Approved by:

 10/16/01
Author/Program Coordinator Date


 01/15/02
Academic Senate Chair Date

Requested by:

 Kate Acks 10-16-01
Unit Chair Date

 01/22/02
Dean of Instruction Date

Recommended by:

 12/05/01
Curriculum Chair Date

 2/14/02
Provost Date

A telephone number, e-mail address, or mailing address at which we can contact the author, Program Chair, Unit Chair or Curriculum Rep during the summer:

MAUI COMMUNITY COLLEGE
COURSE OUTLINE

1. COURSE TITLE: DENT 176
Dental Radiology I
- NUMBER OF CREDITS: Two credits (2)
- ABBREVIATED COURSE TITLE: Dental Rad I
- DATE OF OUTLINE October 6, 2001
2. COURSE DESCRIPTION: Discusses the production, characteristics, and biological effects of radiation, function, components, and operation of the x-ray unit. Includes radiation protection and monitoring; chemistry and techniques associated with x-ray film and developing solutions. Reviews anatomic landmarks and introduces intraoral and long-cone radiographic techniques in bitewing, periapical, and occlusal surveys.
3. CONTACT HOURS PER WEEK: Lecture – One (1), Three (3) lab.
4. PREREQUISITES: Admission to Dental Assisting program or consent
- COREQUISITE(S):
- RECOMMENDED PREPARATION: none

APPROVED BY

Dee Rubin

Date

01/22/02

5. GENERAL COURSE OBJECTIVES

- Describe the process by which x-rays are produced; identifying the physical and electrical factors which alter the density or penetrability of the x-rays produced.
- Review of anatomic landmarks, introduction to intraoral long-cone radiographic techniques.

6. SPECIFIC COURSE COMPETENCIES

Upon successful completion of DENT 176, the student will be able to:

- Describe production, characteristics, and biological effects of radiation.
- Explain the function, components, and operation of the x-ray unit.
- Describe radiation protection and monitoring; chemistry and techniques associated with x-ray film and developing solutions.
- Review of anatomic landmarks, introduction to intraoral long-cone radiographic techniques in the bitewing, periapical and occlusal surveys.
- Define the terms: millamperage, kilovoltage, density, contrast, and exposure time.
- Identify the component parts of the x-ray units and explain the adjustments which can be made to affect the quality of the radiograph.
- Describe the effects of radiation upon the living cell and identify the tissues of the body as being radiosensitive, radioresponsive, or radioresistant.
- Define the terms used to indicate the degree of radiation production or exposure and indicate, where applicable, the allowable, dangerous, or lethal limits for each.
- List the protective measures that can or must be taken to minimize radiation exposure for the patient and operator.
- Develop an exposed radiograph to a consistent density standard while performing all darkroom procedures in a clean, safe, and organized manner.
- Identify each of the developing solutions by name and broad chemical grouping and associate each with the process or chemical activity it initiates, controls, or terminates.
- Identify radiopaque and radiolucent landmarks of the maxilla and mandible.
- Describe prescription procedures and maintenance of radiographic records.
- Recognize and identify types of radiographic faults produced in or on the film by improper darkroom procedures, indicating the means of avoiding or eliminating such errors.

7. RECOMMENDED COURSE CONTENT AND APPROXIMATE TIME SPENT

1 week The characteristics of radiation.

- 4 weeks The production of x-rays.
The x-ray unit, its components and adjustments. X-ray film:
Principles of film placement and beam angulation in dental radiography.
- 2 weeks The biologic effects of radiation and protective measures to minimize
radiation exposure
- 1 weeks Dark room equipment and processing techniques-
- 3 weeks Radiographic landmarks of the skull.
Types of radiographs used in dentistry.
- 4 weeks Film mounting, radiographic records, prescription procedure.
Film evaluation for diagnostic utility .

8. RECOMMENDED COURSE REQUIREMENTS

Specific course requirements are at the discretion of the instructor at the time the course is being offered. Suggested requirements might include, but are not limited to, the following

- Attendance
- Weekly quizzes
- Midterm
- Final exam
- Written and oral reports
- Supervised laboratory practice
- Final lab proficiency exam

9. TEXT AND MATERIALS

Text materials will be selected from the best and most up-to-date materials available, such as

Bird, D. et al, Torres and Ehrich Modern Dental Assisting, current edition, W.B. Saunders Co; ISBN: 0721695299.

Torres, Hazel, Modern Dental Assisting: Workbook, current edition, W.B. Saunders Co; ISBN: 0721676294.

Massler and Schour, Atlas of the Mouth, current edition, American Dental Association.

Frommer, Herbert, Radiology for Dental Auxiliaries, current edition Mosby ISBN: 0323005209.

10. EVALUATION AND GRADING

One or more midterm examinations, quizzes, and a final examination will be given. These tests may include any of the following types of questions: multiple choice, true-false; matching, short answer, short essay, and critical thinking. Exams will cover material from lectures, laboratory exercises, and reading assignments. Satisfactory completion of Final Lab Practical with grade of C or better required.

Weekly quizzes	10-15%
Midterm	10-15%
Final	15-20%
Project	25-30%
Lab practical	10-15%
Final Lab practical	20-25%

11. METHODS OF INSTRUCTION

Instructional methods vary with instructors. Techniques may include, but are not limited to, the following.

- Lecture
- Discussion
- Group projects
- Supervised lab practice