



BROWARD COMMUNITY COLLEGE COURSE OUTLINE

LAST REVIEW: 2007-8

(i.e. 2003-2004)

NEXT REVIEW: 2011-12

(i.e. 2008-2009)

STATUS: A

(A, I, D)

COURSE TITLE: Dental Radiography Laboratory

COMMON COURSE NUMBER: DES 0205L

CREDIT HOURS: 2

CONTACT HOUR BREAKDOWN

(per 16 week term)

CLOCK HOURS: 60

(Voc. Course ONLY)

Lecture:

Lab: **60**

Clinic:

Other:

PREREQUISITE(S): n/a

COREQUISITE(S): DES 0200

PRE/COREQUISITE(S): n/a

COURSE DESCRIPTION:

Laboratory portion of DES 0205. Proper techniques for exposing, processing and mounting radiographs. Laboratory exercises demonstrating proficiency in these techniques will be required.

UNIT TITLES

1. Orientation to the Radiology Facilities
2. Intraoral Radiographic Technique
3. Film Processing
4. Extraoral Radiography
5. Bisecting Technique
6. Radiographic Interpretation
7. Accessory Radiographic Techniques



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ASSESSMENT:

GRADING:

Course grade will be determined by Unit Laboratory Practical evaluations, the Placement Practical evaluation and radiographs (FMS and bitewings), designating the minimum level of competency that must be achieved on each evaluation at 75 percent. If more than one attempt is required for the student to achieve the designated minimum level of competency, the student's first graded attempt will be the one factored into the course grade. No more than three attempts total are permitted. The student must achieve an acceptable attempt in order to satisfy the requirements of this course.

Practicals: 30%
XCP placement and assembly
FMS mounting

Radiographs: 60%
1. FMS with XCP's on Dxxtr 3 - minimum requirement
2. Bitewing sets on Dxxtr 1 - minimum requirement

Placement Practical Evaluation: 10%

Placement on a student partner: Each exposure of an FMS must be simulated with a student partner. The grading will be based on:

- Assembly error of XCP - 2 points
- placement error of XCP – 5 points
- placement of PID error – 5 points
- control panel error – 5 points
- infection control – 10 points
- patient safety errors – 10 points; missing lead apron results in a 10 point deduction and automatic redo of evaluation.

Daily evaluation: any infraction of daily evaluation will come under the Daily Evaluation grade for DEA 0025L, Preclinic Laboratory.

Additional requirements:

- FMS with XCP's on Dxxtr (acceptable/not acceptable; the first one) 1
- FMS bisection on Dxxtr (acceptable/not acceptable) 1
- FMS digital on Dxxtr. (acceptable/not acceptable) 1
- Orthopan on a student partner (test mode, acceptable/not acceptable –
- Placement and exposure of occlusal film on Dxxtr – maxillary and mandibular (acceptable/not acceptable)
- Placement of intraoral radiographs on a classmate (acceptable/not acceptable) – must be done prior to the Placement Practical Evaluation.
- procedure of infection control procedures for radiography (acceptable/not acceptable)
- processing (automatic and traditional; acceptable/not acceptable)
- duplicating (acceptable/not acceptable)



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*Additional requirements are graded on an acceptable or non acceptable basis. A requirement that is graded as non acceptable must be redone and graded as acceptable in order to receive acceptable completion of this course. A graded evaluation must receive a 75 or higher.

Grading for FMS:

- 1 points deducted per error: e.g. foreshortening, elongation, film packet placement, film packet reversal
- 2 points deducted for minor cone cut (film is diagnostically acceptable)
- 4 points deducted for major cone cuts (film is diagnostically unacceptable)
- 5 points deducted for error in XCP assembly and missing films
- 3 points deducted per error of record keeping or labeling

Grading for Bitewings:

- Same as above except for 4 points deducted per type error

The student's letter grade for each course will be determined by the departmental percentage scale:

92 - 100 = A

83 - 91 = B

75 - 82 = C

66 - 74 = D

F

A final grade of "C" or higher must be achieved in all Dental Assisting courses for continuance in the Program.

All graded examinations and projects will be retained by the Dental Assisting Department for the purpose of maintaining the student's academic records. The student may have access to his/her file upon request. An appointment may be necessary to do so.



BROWARD COMMUNITY COLLEGE COURSE OUTLINE

Common Course Number: DES 0200L

UNITS

Unit 1

General Outcome:

1.0 **The student shall:** Demonstrate safe use of all dental radiographic equipment.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 1.1 Locate various areas in the radiology facility.
- 1.2 Identify the component parts of the x-ray unit.
- 1.3 Recognize the safety features included in the facility.
- 1.4 Expose and process a radiograph of an object.



BROWARD COMMUNITY COLLEGE COURSE OUTLINE

Common Course Number:

Unit 2

General Outcome:

- 2.0 The student shall:** Expose, process, mount, and evaluate dental radiographs on a dental manikin and patients using the paralleling or bisecting technique and correct infection control measures.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 2.1** Assemble the XCP rings for each area in the oral cavity.
- 2.2** Place the film for each exposure in the dental arches of a laboratory manikin and Dxxtr.
- 2.3** Mount various full mouth series of radiographs.
- 2.4** Expose 10 radiographs on the maxillary and mandibular left areas of Dxxtr.
- 2.5** Process, mount, and evaluate the 10 radiographs that were previously exposed.
- 2.6** Expose the second half of the full mouth series on Dxxtr.
- 2.7** Process, mount, and evaluate the second half of the full mouth series on Dxxtr.
- 2.8** Prepare the radiography room for a patient using proper infection control techniques.
- 2.9** Place the designated radiographs on a student partner.
- 2.10** Expose, process, mount, and evaluate the number of full mouth series and bitewings that are required.



Common Course Number:

Unit 3

General Outcome:

- 3.0 The student shall: Demonstrate proper maintenance of both the wet tanks and automatic processors, their solutions while utilizing quality control techniques.**

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 3.1** Prepare the processing solutions for the wet tanks and for the automatic processor.
- 3.2** Determine the necessity for changing the processing solutions based upon using quality control techniques.
- 3.3** Process x-ray films in either the wet tanks or in the automatic processor.
- 3.4** Maintain the equipment used for the processing procedure.
- 3.5** Duplicate radiographs that are being sent to another dental office.
- 3.6** Recognize a darkroom error and prevent it from occurring again.



Common Course Number:

Unit 4

General Outcome:

2.0 The student shall:

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 4.1** Prepare the room for a patient using proper infection control techniques.
- 4.2** Set up the unit and computer for taking an orthopan.
- 4.3** Expose on test mode an orthopantomograph on a student partner.
- 4.4** State the steps for printing and labeling the extraoral exposure.



BROWARD COMMUNITY COLLEGE COURSE OUTLINE

Common Course Number:

Unit 5

General Outcome:

3.0 The student shall:

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

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BROWARD COMMUNITY COLLEGE COURSE OUTLINE

Common Course Number:

Unit 6

General Outcome:

4.0 The student shall:

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

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BROWARD COMMUNITY COLLEGE COURSE OUTLINE

Common Course Number:

Unit 7

General Outcome:

5.0 The student shall:

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

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BROWARD COMMUNITY COLLEGE COURSE OUTLINE

Common Course Number:

Unit 8

General Outcome:

6.0 The student shall:

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

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BROWARD COMMUNITY COLLEGE COURSE OUTLINE

Common Course Number:

Unit 9

General Outcome:

7.0 The student shall:

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

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BROWARD COMMUNITY COLLEGE COURSE OUTLINE

Common Course Number:

Unit 10

General Outcome:

8.0 The student shall:

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

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BROWARD COMMUNITY COLLEGE COURSE OUTLINE

Common Course Number:

Unit 11

General Outcome:

9.0 The student shall:

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

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BROWARD COMMUNITY COLLEGE COURSE OUTLINE

Common Course Number:

Unit 12

General Outcome:

10.0 The student shall:

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

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BROWARD COMMUNITY COLLEGE COURSE OUTLINE

Common Course Number:

Unit 13

General Outcome:

11.0 The student shall:

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

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