El Paso Community College
Syllabus
Part II
Official Course Description

SUBJECT AREA	**Dental Assisting**
COURSE RUBRIC AND NUMBER	**DNTA 2252**
COURSE TITLE	**Advanced Dental Radiology**
COURSE CREDIT HOURS	**2 0 : 4** **Credits Lec Lab**

I. Catalog Description

Provides advanced radiographic procedures; for specific and special needs patients. A grade of "C" or better is required in this course to take the next course. **Prerequisite: DNTA 1305. (0:4). Lab fee. Professional Practice Insurance required.**

II. Course Objectives

A. Unit I. Patient Management

1. Review and demonstrate patient education as it applies to dental radiology.
2. Refine techniques and employ several different methods to aid in patient comfort, both emotionally and physically during the x-ray appointment.
3. Refine techniques to establish a rapport with the patient, utilizing both verbal and nonverbal communication, recognizing that each patient brings to the x-ray appointment different apprehensions and physical limitations due to past experiences and oral anatomy or physical handicaps.
4. Gain practice in informing the patient of the necessity to seek dental care that was indicated on radiographs or during clinical examination.

B. Unit II. Practice in the Full Mouth Survey (FMS)

1. Refine techniques to expose, process and interpret diagnostic FMS meeting minimum competency of 75%. Techniques in processing will include utilization of the manual processor and maintenance procedures on both manual and automatic processors.
2. Discuss, with the instructor, all errors in technique and indicate the appropriate correction necessary.
3. Refine techniques to recognize and indicate, in writing on the FMS interpretation sheet, all abnormal oral conditions present on the survey.
4. Expose a FMS on a cooperative patient within twenty minutes.

C. Unit III. Advanced Exercises in Radiographic Interpretation

1. Review procedures necessary to recognize and interpret abnormal conditions when viewing radiographs.
2. Review how dental appliances and foreign objects located in the mouth appear in radiographs.
3. Refine techniques to determine what oral condition may be present by signs and symptoms uncovered and the changes from normal that appear on radiographs.

D. Unit IV. Pedodontic Surveys

1. Refine techniques to expose, process and evaluate a minimum of two pedodontic surveys meeting a minimum competency.
2. Discuss with the instructor all errors in technique and indicate the appropriate correction necessary.
3. Expose a pedodontic survey on a cooperative patient with in twenty minutes.

E. Unit V. Special Technique

1. Determine the special technique that can be utilized when a periapical survey is not indicated.
2. Explain the principles of the buccal object rule (SLOB rule).
3. Expose a minimum of two radiographs on a manikin utilizing the buccal object rule.
4. Expose a minimum of four radiographs on a manikin utilizing the occlusal technique (topographical and cross sectional).
5. Expose, process and interpret on a evaluation sheet all abnormal oral conditions present on a survey.
6. Expose radiographs with DEXTR in a supine position, using both extension cone parallel (XCP) and Snap-A-Ray (SAR) techniques.
7. Describe where the image of an object will appear on the radiographs whenever the direction of the central ray is changed.
8. Demonstrate on a manikin how to use the distal-objective rule to project an image onto the film.
9. Expose on an edentulous manikin a full mouth series of intra-oral radiographs.
10. Explain and demonstrate the proper intra-oral technique for digital x-rays.

F. Unit VI. Extra-oral Radiology

1. Expose a panoramic extra-oral radiograph on a patient with dentition and demonstrate how to expose one on an edentulous patient.
2. Define the following terms: laminography, panography, tomography and cephalometric.
3. Describe the anatomical landmarks and pathologic conditions that can normally be seen on extra-oral radiographs.
4. List possible errors that can occur in taking and processing extra-oral film.
5. Describe the purpose of the lateral jaw, lateral skull, posterior-anterior, lateral sinus and temporo-mandibular joint series of extra-oral radiographs.
6. Give the main uses for panoramic radiographs and compare them to intra-oral radiographs.
7. Describe film processing of panoramic film and contrast it to intra-oral film processing.
8. List the advantages and disadvantages of the panoramic film.
9. List at least five exposure errors that can occur due to improper patient positioning and describe how each error will appear on the radiographs.
10. List five uses for cephalometric in the dental orthodontic specialty.
11. List four skeletal, dental and soft tissue relationship that can be determined with cephalometric radiographs.
12. List the equipment required to take cephalometric radiographs.
13. Detect any positioning errors that might have occurred on extra-oral exposures.
14. Name gross anatomic structure and any gross pathology that can been on extra-oral exposure.

G. Unit VII. Endodontic Radiographs

1. Expose intra-oral completion endodontic radiographs with the patient in the supine position and without removing isolation barriers.
2. Describe how to use rapid developing procedures.
3. Apply the buccal-object rule to locate two canals that are in the bucco-lingual relationship to each other.

H. Unit VIII. Duplication of Radiographs

1. Demonstrate the duplication of radiographs.

III. THECB Learning Outcomes (WECM)

1. Expose, and process radiographs on patients utilizing various radiographic techniques.
2. Critique mounted radiographs.

IV. Evaluation

Progress Assessment
Radiographic surveys will comprise 100% of the final grade for this class. Each survey will be evaluated for exposure technique (50%) and interpretation (50%). Grades for all surveys submitted will be averaged for a final grade.

Grading Scale

93 – 100	A
83 – 92	B
75 – 82	C
74 or below	F

Remediation
Graded assignments will be returned to the student in a timely manner for the student's use in estimating his/her progress in the course. Additionally, the instructor will conduct periodic progress discussions with each student. However, it is the student's responsibility to schedule an individual conference with the instructor should either party feel that the student is not meeting at least the minimum passing standard for the course. The instructor may provide remediation opportunities which may include but are not limited to: supplemental assignments, reexamination, presentations, community projects, etc. One full class day will be reserved at the end of the semester for remediation of radiographic surveys if necessary.

Students must receive a "C" or better to receive credit for completion of a degree plan in dental assisting

V. Disability Statement (American with/Disabilities Act [ADA]

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

VI. 6 Drop Rule

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.