

<p style="text-align: center;"><b>Course Outcomes Guide</b> <b>Fall 2016</b></p>
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**Course/Program Title: DEN 104 Dental Radiology**

**Date: Fall 2016**

**Course/Program Team: Professor Rebecca Leonard**

**Expected Learning Outcomes:**

- 1. Demonstrate proper placement techniques for dental radiographs**
- 2. Illustrate proper usage of the dental radiographic equipment.**
- 3. Summarize the dental laws governing dental radiography and dental assistants.**
- 4. Properly utilize the Standard Precautions when exposing and developing radiographs**
- 5. Locate anatomic landmarks on radiographs**
- 6. Patient education**
- 7. Identify proper radiographic surveys for patients.**
- 8. Understanding KVP, MA, Intensity etc.....**
- 9. Radiology interpretation**

**Assessment: Course completion: Number passing at 75% or greater**

<b>CO #1</b>	<b>Final exam question #84, #85, #86</b>
<b>CO#2</b>	<b>Final exam questions #146, #147, and #148</b>
<b>CO#3</b>	<b>Final exam question #14, #55</b>
<b>CO#4</b>	<b>lab comps 5, 6</b>
<b>CO#5</b>	<b>Final exam questions #110, #111, and #112</b>
<b>CO#6</b>	<b>final exam questions #15, #47</b>
<b>CO#7</b>	<b>final exam questions #75 and #76</b>
<b>CO#8</b>	<b>Final exam questions #20 and #21</b>
<b>CO#9</b>	<b>final exam question #62, #63 and #64</b>

**Validation:**

**Completion of course with an average grade of 75% or higher: Average grade for Final exam Fall 2016: 83.4**

**Course outcome 1    Final exam questions #84, #85 and #86    placement techniques**

Course outcome 2	Final exam questions 146, 147 and 148	maintenance of equipment and storage
Course outcome 3	Final exam questions #14 and #55	state laws/ethics
Course outcome 4	lab comps.	asepsis techniques/ precautions when exposing
Course outcome 5	final exam questions 110, 111 and 112	Locate anatomic landmarks
Course outcome 6		Patient education
Course outcome 7	final exam questions 75 and 76	needs assessment for radiology
Course outcome 8	final exam questions 20 and 21	Understanding KVP, MA, how this affects the radiograph
Course outcome 9	final questions 62, 63, 64	Interpretation of radiographs

#### **Results: Course completion:**

**100% (21/21) completed the course with a grade of 75% or higher**

**0% (0/21 students) completed this course with a grade of <75%**

#### **Course outcomes (common quizzes and final exam questions): N-21**

**Course outcome #1:** #84: 17/21 answered correctly for 80%, #85: 21/21 answered correctly for 100%, and #85: 15/21 answered correctly for 72 %

**Course outcome #2** #146: 20/21 answered correctly for 95%, #147: 11/21 answered correctly for 52% and #148: 10/21 answered correctly for 47%.

**Course outcome #3** #14: 20/21 answered correctly for 95%. #55: 18/21 answered correctly for 86%.

**Course outcome #4** 100% of students received a pass on lab comps concerning standard precautions.

**Course outcome #5** #110: 7/21 answered correctly for 33%, #111: 21/21 answered correctly for 100% and #112: 20/21 answered correctly for 95%

**Course outcome #6** #15: 17/21 answered correctly for 81%, #47: 21/21 answered correctly for 100%

**Course outcome #7** #75: 20/21 answered correctly for 95% and #76: 21/21 answered correctly for 100%

**Course outcome #8** #20: 19/21 answered correctly for 90% and #21: 19/21 answered correctly for a 90%.

**Course outcome #9** #62: 15/21 answered correctly for 72%, #63: 16/21 answered correctly for 76% and #64: 12/21 answered correctly 57%.

#### **Follow-up:**

**CO #1 question #85: only 72% of students answered correctly. This question asks the recommended sizes of occlusal films for adults and children. Emphasize this topic more**

with the next class. Perhaps order size 4 films so the students can have hands on experience with the occlusal films.

CO#2: Questions #147 and #148 were a problem. These questions pertained to critical, non-critical and semi critical instruments. Develop a game that can be played in lab to help students grasp this concept more thoroughly.

CO#3: Laws of dentistry: students answered these question satisfactory and I will not need to make any changes.

CO#4: Standard precautions: no changes

CO#5: anatomic landmarks; Question #110 only 33%: This questions was complex asking the students where the boy septa and nutrient canals may be seen, through the walls of the maxillary sinus. In the future it would be helpful to use the human skull models more to help the students visualize these landmarks. \* May want to remove this question\*\*

CO#6: patient education: no changes.

CO#7: no changes

CO#8: no changes

CO#9: interpretation: this area needs work, especially question #64: this question asks how calculus appears on a radiograph. Only 57% of students answered correctly. Emphasize this area more next year.