**Course Title:** Diagnostic Radiography for the Dental Hygienist  
**Department:** Allied Health Division  
**Curriculum:** Dental Hygiene  
**Date submitted:** January 2015  
**Course Code:** DHY*212  
**Course Type:** X/L/D  
**Prerequisites:** Matriculation into dental hygiene  
**Elective Type:** G  
**Credit Hours:** 3  
**Corequisites:**  
**Other Requirements:** Must attain clinical diagnostic patient FMS with no more than two retakes.

### Course Descriptors:

Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.

### Catalog Course Description:

Concentrates on production, evaluation and interpretation of intraoral and panoramic radiographs, radiation safety and biology. Radiographic competency must be met in the production and evaluation of diagnostic full mouth series in the laboratory setting as well as on a client/patient.

### Topical Outline:

1. X-Ray Production, Physics, Radiation Characteristics And Shadow Casting  
2. Intraoral Radiographic Techniques  
3. Acquisition, Manipulation, Processing And Evaluation Of Radiographic Images  
4. Radiation Biology And Safety  
5. Infection Control Techniques For Radiographic Imaging  
6. Normal Anatomy And Film Mounting Basics  
7. Image Interpretation Basics And Localization Techniques  
8. Extraoral Radiographic Techniques  
9. Quality Assurance And Legal Issues

### Outcomes:

Upon successful completion of this course, the student will be able to do the following:

skills or knowledge that
students should be able
to demonstrate as
evidence that they have
mastered the course
content.

| 1. | assess and treatment plan patient's/client's radiographic needs |
| 2. | produce diagnostic full mouth series, bitewings, occlusals, distobliques, and panoramic radiographs with as low as reasonably achievable radiation |
| 3. | demonstrate the ability to proficiently evaluate and interpret radiographs |

**PROGRAM:** (Numbering reflects Program Outcomes as they appear in the college catalog)

**GENERAL EDUCATION:** (Numbering reflects General Education Outcomes as they appear in the college catalog)

2. Critical Analysis/ Logical Thinking - Students will be able to organize, interpret, and evaluate evidence and ideas within and across disciplines; draw reasoned inferences and defensible conclusions; and solve problems and make decisions based on analytical processes.

**Demonstrates:** Identifies the issue(s); formulates an argument; explains and analyzes relationships clearly; draws reasonable inferences and conclusions that are logical and defensible; provides support by evaluating credible sources of evidence necessary to justify conclusions.

**Does Not Demonstrate:** Identifies few or no issues; formulates an argument without significant focus; provides an unclear explanation of analysis and relationships; drawing few reasonable inferences and conclusions that are illogical and indefensible; provides little to no support using credible sources of evidence necessary to justify conclusions.

**Assessment will be based on the following criteria:**

1. exams
2. activities
3. laboratory assignments
4. client full mouth series

*Students must achieve a minimum of 75% (*"C") in both clinical/laboratory and didactic components for successful completion of this course.

*Students must attain a clinical diagnostic FMS on the final full mouth series practical on a mannequin prior to client/patient exposure. If student does not attain a diagnostic series with no more than TWO retakes, the student must retake the final full mouth series practical. The initial grade will be the score recorded for the final practical.

*Students must attain a clinically diagnostic client/patient FMS with no more than TWO retakes.

**Instructional Resources:**

**Required:** Direct and indirect digital radiography equipment (x-ray machines, computers, digital sensors, phosphor plates, radiographic acquisition software)

Radiographic mannequins
Receptor holder devices
Panoramic digital radiography equipment
Client full mouth series for interpretation

**Desired:** None

**Textbook(s)**

*Dental Radiography: Principles and Techniques,* Joen Iannucci, DDS, MS and Laura Jansen Howerton, RDH MS