# COURSE SYLLABUS

**Course Title:** Diagnostic Radiography for the Dental Hygienist  
**Date submitted:** May 2020 (AAC: 20-35)  
**Department:** Allied Health  
**Curriculum:** Dental Hygiene

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

<table>
<thead>
<tr>
<th>Course Code:</th>
<th>(eg. ACC 101)</th>
<th>DHY*212</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Type:</strong></td>
<td></td>
<td>X/L/D</td>
</tr>
<tr>
<td>AH: Art History</td>
<td>E: English</td>
<td>FA: Fine Arts</td>
</tr>
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</table>

**Elective Type:** G

<table>
<thead>
<tr>
<th>Credit Hours:</th>
<th>4</th>
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<tbody>
<tr>
<td>Developmental:</td>
<td>No</td>
</tr>
<tr>
<td>Lecture:</td>
<td>2</td>
</tr>
<tr>
<td>Clinical:</td>
<td>0</td>
</tr>
<tr>
<td>Lab:</td>
<td>3</td>
</tr>
<tr>
<td>Studio:</td>
<td>0</td>
</tr>
<tr>
<td>Other:</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>5</td>
</tr>
</tbody>
</table>

**Class Maximum:** 30  
**Semesters Offered:** Fall

## Prerequisites:
Matriculation into dental hygiene

## Corequisites:
None

## Other Requirements:
None

## 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.

## Topical Outline:
List course content in outline format.

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:
Describe measurable skills or knowledge that students should be able to do the following:
1. assess and treatment plan patient's/client's radiographic needs

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to demonstrate as evidence that they have mastered the course content.

2. produce diagnostic full mouth series, bitewings, occlusals, distobliques, and panoramic radiographs with as low as low as diagnostically acceptable.

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

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

The course grade will reflect the letter grade of the component not attaining a minimum of a 75.

*Students must attain a clinical diagnostic FMS on the final full mouth series practical on a mannequin prior to any client/patient exposures. 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.

Instructional Resources:

List library (e.g. books, journals, online resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.

**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