### COURSE SYLLABUS

<table>
<thead>
<tr>
<th>Course Title:</th>
<th>Dental Radiography for the Dental Assistant</th>
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<tbody>
<tr>
<td>Department:</td>
<td>Allied Health</td>
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<td>Curriculum:</td>
<td>Dental Assisting</td>
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<tr>
<td>Course Code:</td>
<td>DAS*165</td>
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<tr>
<td>Prerequisites:</td>
<td>C or better in Dental Materials for the Dental Assistant (DAS<em>130); Essential Chairside Functions for the Dental Assistant (DAS</em>140) and Oral Anatomy for the Dental Assistant (DAS*146)</td>
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<td>Credit Hours:</td>
<td>3</td>
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<td>Elective Type:</td>
<td>G</td>
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<td>Corequisites:</td>
<td>Matriculation in the Dental Assisting Program</td>
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<td>Other Requirements:</td>
<td>Current CPR/First Aid Certification</td>
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<td>Class Maximum:</td>
<td>24-Lec, 12-Lab</td>
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<td>Semesters Offered:</td>
<td>W</td>
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<td>Ability Based Education (ABE) Statement:</td>
<td>At Tunxis Community College students are assessed on the knowledge and skills they have learned. The faculty identified the General Education Abilities critical to students' success in their professional and personal lives. In every class, students are assessed on course abilities, sometimes program abilities, and, in most classes, at least one General Education Ability. Students will receive an evaluation of the degree to which they have demonstrated or not demonstrated that General Education Ability.</td>
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<td>Catalog Course Description:</td>
<td>Provides and in-depth study of principles of the X-ray production and radiation physics, biology, and safety. The learned concepts in quality assurance; radiographic image identification and mounting; and patient management are applied in the study of intraoral and extraoral techniques.</td>
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| Topical Outline: | 1. Radiation history and radiology physics  
2. Radiation characteristics  
3. Principles of image production  
4. Radiation Biology  
5. Radiation protection and quality assurance |
Outcomes:

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

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

1. explain ideal radiographic image production
2. identify and practice current radiation health and safety procedures
3. expose, capture and mount intraoral and extraoral diagnostic dental images applying appropriate techniques and receptor holding devices in both laboratory and clinical patient care settings
4. display competence in paralleling and bisecting techniques incorporating latest technology procedures
5. mount a full mouth survey of dental images with 100% accuracy
6. identify normal radiographic anatomy, dental caries, bone loss, restorations, technique errors, and various findings

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

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

Dental Assisting Certificate Program:

5. Technology Literacy - effectively uses technology to accomplish assigned tasks.

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.

Evaluation:

List how the above outcomes will be assessed.

Assessment will be based on the following criteria:

1. Quizzes
2. Examinations
3. Laboratory assignments
**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:**
- Computerized digital imaging equipment
- Dental X-ray unit(s)
- Adult and child X-ray mankins
- Receptor holding devices and collimation devices that meet Profession standards and State, Federal laws

**Desired:**

**Textbook(s)**

- Torres and Ehrlich *Modern Dental Assisting*, Bird DL, Robinson DS, Latest Edition