Course Specification
Student Version

Course Title:	Oral & Maxillofacial Radiology - 1
Course Code:	DDC 321
Department:	Dentistry
Program:	Bachelor of Dentistry
College:	Vision College in Riyadh
Institution:	Vision College in Riyadh
Revised:	July 2025

A. Course Identification

1. Credit hours: 2 (1+1+0)
2. Level/year at which this course is offered: Level 6 / Year 3
3. Pre-requisites for this course (if any): GDC 211
4. Co-requisites for this course (if any): None

B. Teaching Methods

1	Lecture
2	Practical Session (Simulations Based Learning)
3	Case-based Learning (CBL)

C. Course Description and Objectives

1. Course Description

This 2-credit hour course consists of one theory and one practical session. Students will explore various intraoral digital imaging techniques. Moreover, the course will introduce the principles of radiographic interpretation, enabling students to apply this knowledge to assess radiographic images and generate differential diagnoses for carious, pulpal, periapical, and periodontal pathologies.

2. Course Main Objective

By the end of the course, students will develop a strong foundation in oral radiology. The primary objective is to introduce students to the fundamentals of radiographic techniques, the biological effects of radiation, normal radiographic anatomy, and the basics of interpreting common dental diseases.

3. Course Objectives

By the end of this course, students should be able to:

- Demonstrate a comprehensive understanding of the principles of radiation physics, biology, and safety.
- Describe the various types of radiographic imaging techniques and their applications.
- Identify normal anatomical landmarks on dental radiographs.
- Discuss principles of interpretations with a comprehensive understanding of common radiographic abnormalities associated with caries, pulpitis, periapical lesions, and periodontal disease.
- Analyze radiographic images to identify diagnostic features and make accurate interpretations.
- Evaluate the quality of radiographs and identify potential errors in technique.
- Utilize dental x-ray equipment and take high-quality radiographs.
- Implement digital technology while taking a radiograph effectively
- Demonstrate ethical and professional behavior in the use of ionizing radiation and safety protocols.

D. Course Content

No	List of Topics
1	Physics and Biology of radiation
2	Radiation safety & protection
3	Radiographic Quality Assurance & Infection Control
4	Radiographic Films & Processing
5	Normal anatomic landmarks
6	Oral and maxillofacial radiology techniques, and digital radiography
7	Ideal radiograph exposure and technique errors
8	Principles of radiographic interpretation and differential diagnosis of carious, pulpal, periapical, and periodontal lesions and dental trauma
9	Simulation-based sessions

E. Assessment Tools

#	Assessment task	Percentage of Total Assessment Score
1	Written Exam (Midterm)	20%
2	Simulation-Based Assessment	15%
3	Written Exam (Quizzes)	10%
4	OSPE	20%
5	Case-Based Assessments	5%
6	Written Exam (Final exam)	30%
	Total	**100%**

F. Learning Resources

Essential References	• Oral Radiology Principles and Interpretation. White and Pharoah., Elsevier, 6 Edition, 2009. • Dental Radiography, Principles and Techniques. Jaen Howerton and Laura Jansen. Saunders, 4 Edition, 2011.
Supportive References	Essentials of dental radiography and radiology. Whaites E and Drage N. Elsevier, Edinburgh: Churchill Livingstone, 2015.
Electronic Materials	LMS, Online resources on MOODLE
Other Learning Materials	None