

## Course Specification Student Version

|                      |                          |
|----------------------|--------------------------|
| <b>Course Title:</b> | Oral Biology - 1         |
| <b>Course Code:</b>  | DDC 251                  |
| <b>Department:</b>   | Dentistry                |
| <b>Program:</b>      | Bachelor of Dentistry    |
| <b>College:</b>      | Vision College in Riyadh |
| <b>Institution:</b>  | Vision College in Riyadh |
| <b>Revised:</b>      | July 2025                |

## A. Course Identification

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

## B. Teaching Methods

|   |             |
|---|-------------|
| 1 | Lectures    |
| 2 | Assignments |

## C. Course Description and Objectives

### 1. Course Description

This course offers an in-depth exploration of oral tissue histology and embryological development. The initial section introduces the fundamentals of histology, covering the structure of cells, cell division, and the various types of body cells found in the human body, with a particular focus on oral tissues. The course also provides a detailed study of the development of oral tissues and organs, with special emphasis on the development and eruption of teeth.

### 2. Course Main Objective

By the end of this course, students will have a comprehensive understanding of the embryological development and histology of oral tissues, as well as the development, eruption, and shedding of teeth.

### 3. Course Objectives

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

- Identify the structure, components, and functions of an animal cell, and gain a comprehensive understanding of cell division.
- Demonstrate a comprehensive understanding of the various types of tissues, organs, and systems, including their structure, function, and interrelationships.
- Discuss the structures derived from the three germ layers, including the development of the face and teeth
- Demonstrate a comprehensive understanding of the development of structures in the oro-facial region, including the branchial arches and the associated nerves and arteries, and developmental disorders.
- Explain the development, eruption, and shedding of teeth.
- Discuss the role of stem cells and their applications in medicine and dentistry, including their potential for regeneration, repair, and therapeutic innovations
- Interpret histological images of normal oral structures
- Illustrate histological features of oral and maxillofacial structures through detailed drawings.
- Demonstrate a strong sense of professional conduct in dentistry.

#### D. Course Content

| No | List of Topics                                       |
|----|--|
| 1  | Introduction and Orientation                         |
| 2  | Development and structure of cells and tissues       |
| 3  | Structure and function of cells, tissues, and organs |
| 4  | Development of the oral facial region and Palate     |
| 5  | Development of teeth                                 |
| 6  | Eruption and shedding of the teeth                   |
| 7  | Stem Cells Applications                              |

#### E. Assessment Tools

| # | Assessment task           | Percentage of Total Assessment Score |
|---|---------------------------|--------------------------------------|
| 1 | Written Exam (Midterm)    | 30%                                  |
| 2 | Assignment                | 10%                                  |
| 3 | Written Exam (Quizzes)    | 20%                                  |
| 4 | Written Exam (Final exam) | 40%                                  |
|   | <b>Total</b>              | <b>100%</b>                          |

## F. Learning Resources

|                                 |  |
|---------------------------------|--|
| <b>Essential References</b>     | Essentials of Oral Histology and Embryology. A Clinical Approach 4th edition |
| <b>Supportive References</b>    | Related reading material is available in the college library                 |
| <b>Electronic Materials</b>     | LMS, Online resources on MOODLE  |
| <b>Other Learning Materials</b> | None   |

