

## Course Specification Student Version

Course Title:	Introduction to Scientific Research
Course Code:	GDC 311
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 5/Year 3
3. Pre-requisites for this course (if any): None
4. Co-requisites for this course (if any): None

## B. Teaching Methods

1	Lecture
2	Practical session
3	Research project

## C. Course Description and Objectives

### 1. Course Description

This is a didactic and practical course during the 3rd year. It is an introductory course to scientific research in dental sciences. Both didactic and practical components cover the different scopes of the main topics in the field of scientific research.

### 2. Course Main Objective

The main purpose of this course is to provide dental students with the knowledge and skills that would enable them to undertake and deal with different aspects of scientific research.

### 3. Course Objectives

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

- Define the scientific research and its different study designs.
- Describe the steps of designing research proposal & questionnaire.
- Discuss the importance of ethics in scientific research.
- Describe the principles of bibliographic management in scientific research.
- Discuss the methodology of data collection, research writing, and publications.
- Formulate a research question and perform a literature search effectively.
- Develop appropriate research proposals and questionnaires.
- Use citation management tools in research effectively.
- Demonstrate a collaborative teamwork in research projects.

## D. Course Content

No	List of Topics
1	Introduction to scientific research
2	Research question, definition, and formulation
3	Effective literature review conduction
4	Study designs
5	Research proposal, formulation, and writing
6	Designing a research questionnaire
7	Ethics in scientific research
8	Research data collection and management
9	Bibliographic management
10	Manuscript writing and publication
11	Research projects sessions

## E. Assessment Tools

#	Assessment task	Percentage of Total Assessment Score
1	Assignments Evaluation	10 %
2	Written Exam - Quizzes	10 %
3	Written Exam - Midterm	20 %
4	Research Project Evaluation	20 %
5	OSPE	10 %
6	Written Exam - Final	30 %
	<b>Total</b>	<b>100%</b>

## F. Learning Resources

<b>Essential References</b>	<ul style="list-style-type: none"> <li>Basic Principles and Methodology of Clinical Research in Dentistry (2024). Lars Bondemark and Per-Erik Isberg. Cambridge Scholars Publishing. 1st edition.</li> <li>Introduction to clinical research for residents (2014). Hani Tamim. Saudi Commission for Health Specialties - King Fahd National Library Cataloging-in-Publication Data. 1st edition.</li> </ul>
<b>Supportive References</b>	<ul style="list-style-type: none"> <li>None</li> </ul>
<b>Electronic Materials</b>	<ul style="list-style-type: none"> <li>LMS</li> <li><a href="https://pubmed.ncbi.nlm.nih.gov/">https://pubmed.ncbi.nlm.nih.gov/</a></li> <li><a href="https://scholar.google.com/">https://scholar.google.com/</a></li> </ul>
<b>Other Learning Materials</b>	<ul style="list-style-type: none"> <li>None</li> </ul>