



Beni-Suef University
Faculty of Dentistry
Quality Assurance Unit
Course Specification



University: **Beni-Suef** Faculty: **Dentistry**
Course Title: **Dental biomaterials 2** Course code: **DBM 222**
Program on which the course is given: **Bachelor of dental science, Graduate program**
Department offering the course: **Dental biomaterial**
Academic year: **2023/2024** Academic level: **2nd** Semester: **2nd**
Date of specification approval: **September 2023**

A-Basic Information

Academic Year:	2023-2024
Course Code:	DBM 222
Lecture hours:	2 hours
Practical hours:	2 hours
Total credit hours:	3 hours
Prerequisite if present:	Dental biomaterials 1

B-Professional Information

1-Overall aims of course

Pregraduate students will gain knowledge about different impression materials, model and die materials dental biomaterials used for restorations, also removable and fixed prosthodontics and their recent advances.

2-Intended learning outcomes of course (ILOs)

a. Knowledge and understanding

a1-Describe impression materials classification and its different types, their properties and uses.

a2-Identify different types of model and die materials.

a3-Understand different denture base materials composition, properties and manipulation.

a4-Identify different types of dental cements and their properties, classification and manipulation

a5-Identify different types of restorations and their properties, classification and manipulation.

a6-Describe dentin bonding agents.

a7-Describe dental porcelain and all ceramic classification and manipulation also requirements of metal-ceramic restorations and ceramics strengthening methods

b. Intellectual skills

b1-Differentiate between different types of impression materials.

b2-Compare between proper and improper manipulation of different denture base materials used.

b3-Distinguish different types of dental cements.

b4-Compare between different types of dental restorations

c. Professional and practical skills

c1-Manipulate different impression materials properly.

c2-Manipulate different denture base materials properly

c3-Manipulate different cements properly

c4-Manipulate different restorations properly

c5-Use dental biomaterials in an adequate manner

d. General and transferable skills

d1-Be aware that dental biomaterials are developing rapidly, therefore a continuous update with regard to knowledge and skills is needed.

d2-Use of modern technology such as computer and the internet to search for data and/ or preparing scientific presentations.

3-Contents:

Topic	lecturer	Number of Lecture sessions covering the topic	Number of Practical sessions number covering the topic	Total hours	Weighing of the topic	ILOs covered by this topic	Teaching method used for this topic	Assessment methods used for this topic
Impression materials	Dr/Diaa	3	3	12	26%	a1,b1,c1	Interactive lecture Demonstration videos	Midterm, final, practical
Model and die materials (online)	Dr/Diaa	1	1	4	8.7%	a2	Interactive lecture Demonstration	Midterm, final, practical
Denture base materials	Dr/Diaa	2	2	8	17.4%	a3,b2,c2, d1	Interactive lecture Demonstration videos	Midterm, final, practical
Dental cements	Dr/Diaa	2	2	8	17.4%	a4,b3,c3, c5, d1, d2	Online Demonstration videos Small group discussion / Brain storming	Course work , final, practical

Dental Amalgam (online)	Dr/Diaa	1	1	4	8.7%	a5,b4,c4,c5,	Interactive lecture Small group discussion / Brain storming	Course work , final, practical
Dental composites and dentin bonding agents	Dr/Diaa	2	2	8	17.4%	a5,a6,b4,c4,c5, d1, d2	Online Demonstration videos Small group discussion / Brain storming	Course work , final, practical
Dental porcelain and all ceramic restorations	Dr/Diaa	1	1	4	8.7%	a7, d1, d2	Interactive lecture Demonstration	Course work , final, practical

4- Teaching and learning methods

Interactive lecture
Demonstration videos
Small group discussion / Brain storming
Demonstrations
Online

5- Student assessment methods

- a. Written, Enumerate and short answer question.
- b. Multiple choice questions (MCQ)
- c. Complete the following
- d. True or False with justifying answer
- e. Give reason
- f. Mid-year exam
- g. Oral exam
- h. Practical exam
- i. Final exam

- j.

5.B Assessment schedule

Assignment	Time
Midterm exam	March 2024
Practical exam	April 2024
Oral exam	June 2024
Final exam	June 2024

Weighting of assessments

	Written	Practical	Oral Exam	Midterm and course work	Total
Final Exam	40	20	10	30	100

- List of reference;

- 1- Power Point of lectures
- 2-Text books

- Craig RG: restorative Dental Materials 14th edition 2019
- Philips' Science of Dental Materials 13th edition 2022

Facilities required for teaching and learning

Materials, equipment and devices are needed for more learning requirements

Course director: **Dr/Diaa Elmwafy**

Head of department: **Dr/Ahmed Nabil**

Date: **September 2023**

A handwritten signature in black ink, appearing to read 'Dr. Ahmed Nabil', is written on the page.