



**Jordan University of Science and Technology**  
**Faculty of Applied Medical Sciences**  
**Dental Technology Department**

TDEN203 Dental Materials
First Semester 2021-2022

<b>Course Catalog</b>
<p>2 Credit Hours. This course is designed to the undergraduate students at the 2nd year and it is a two Credit hour theoretical course. This course will provide introduction, knowledge and understanding of the dental materials with emphasis on those restorative and processing materials used during constructing of dental prostheses and impression materials commonly used in dental practice and laboratory. This course is also linked with a practical course (TDEN 205) which enables the students to see and examine the different dental materials used in dental practice.</p>

<b>Text Book</b>	
<b>Title</b>	Applied Dental Materials.
<b>Author(s)</b>	McCabe J. and Walls A.
<b>Edition</b>	9th Edition
<b>Short Name</b>	Main reference: Applied Dental Materials.
<b>Other Information</b>	Blackwell Publishers 2008

**Course References**

Short name	Book name	Author(s)	Edition	Other Information
Introduction to Dental Materials	Introduction to Dental Materials,	Van Noort R.	2nd Edition	Mosby Publisher (2002)

<b>Instructor</b>	
Name	<b>Mrs. Elina Al Twal</b>
Office Location	Faculty of Applied Medical Sciences building-Second Floor
Office Hours	
Email	eqaltwal@just.edu.jo

<b>Class Schedule &amp; Room</b>
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Section 1:  
Lecture Time: Mon : 10:00 - 11:00  
Room: N4206

Section 2:  
Lecture Time: Wed : 10:00 - 11:00  
Room: N4206

Section 3:  
Lecture Time: Mon : 10:00 - 11:00  
Room: LAB

Section 4:  
Lecture Time: Wed : 10:00 - 11:00  
Room: LAB

Section 5:  
Lecture Time: Sun : 08:30 - 09:30  
Room: M3302

### Prerequisites

Line Number	Course Name	Prerequisite Type
521020	ADS102 Introduction To Dental Sciences & Dental Terminology	Pre./Con.

### Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Introduction to the course	
Weeks 2, 3	Science of dental materials and properties	
Week 4	Gypsum materials	
Weeks 5, 6	Impression Materials	
Week 7	Waxes and Investments	
Week 8	Metals and Metal alloys in dentistry	
Week 9	polymers	
Weeks 10, 11	Ceramics	
Week 12	Composites and abrasives	

Mapping of Course Outcomes to Program Student Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Understand and be able to describe the various properties of dental materials such as the mechanical, physical, electrical, and biological characteristics of dental materials	20%	

The student should be familiar with gypsum products used in dental practice, their composition properties and their uses	10%	
The student should be familiar with impression materials and be able to differentiate between the different types of impression materials such as elastomeric impression materials and non elastic impression materials along with their properties and indications.	15%	
The student should be familiar with dental waxes, their composition and uses	5%	
The student should be familiar with the investing and casting procedures and the different materials used in these processes.	5%	
The student should be familiar with the different types of metal alloys used in the dental practice	10%	
The student should be familiar with polymers, their composition and uses in dental practice.	10%	
The student should determine the indications and selection of various restorative materials such as, ceramics and composite materials.	20%	
The student should be able to differentiate between different finishing and polishing materials used during construction of dental restorations and their specific indications	5%	

<b>Policy</b>	
Statement on Professionalism	Professional behavior is expected of students at all times. Attitude and professional behavior are a minimum criterion for passing this class. Examples of unprofessional behavior include but are not limited to: missing classes, tardiness, lack of attention for a speaker, talking to others during lecture, leaving a lecture prior to its completion without prior authorization of the instructor, working on other class material during class, and sleeping during class.
Cheating	University regulations will be applied on cases of cheating
Cell phone:	The use of cellular phone is prohibited in class rooms and during exams. The cellular phone must be switched off in class rooms and during exams.
Attendance	No points will be count for points attendance of this class, however attending the lectures will greatly enhance your grade. The student is responsible for any information discussed in lecture sessions. It is imperative to attend all classes!
Absences:	University regulations will be applied. Students are not allowed to be absent for more than 20% of lectures for any reason or excuse. If a student exceeds the absence limit, he or she will not be allowed to sit for future course exams. (Please review university regulation for more details)
Make-up Exam	Make-up exams is entitled for students who miss the exam with accepted legal or medical excuse endorsed by the instructor within 24 hours after the scheduled exam (Please review university regulation for more details)
Feedback	Concerns, complaints, questions, and/or feedback are appreciated and will be important for the instructor. You can contact your instructor using the e-mail or during office hours

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