**Jordan University of Science and Technology**
**Faculty of Applied Medical Sciences**
**Department of Applied Dental Sciences**
**Course syllabus**
**First Semester 2016-2017**

| Course Information | |
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| **Course Title:** | **Dental Materials Practical** |
| **Course Code** | **TDEN 205** |
| **Course Credit** | **1Cr hour Practical** |
| **Co-requisite** | **TDEN 203** |
| **Course Coordinator:** | **Alina Al Twal** |
| **Instructors:** | **Alina Al Twal, Dr. Isra' Al Bakri** |
| **Office phone:** | **02/7201000 Ext. 26951** |
| **Office location:** | **Applied Medical Sciences building- Second floor** |
| **Office hours: :** | **Monday 1:15-2:15,Thursday 12:15-1:15, susceptible to change and will be confirmed during the lecture** |
| **Email**: | **eqaltwal@just.edu.jo.** |

**Course Description:**

This course is designed to the undergraduate students at the 2rd year and it is a one credit hour practical course which enables the second year students to be introduced, to examine and be able to differentiate between the different types of dental materials used in dental practice. This course is also linked to a theoretical course (TDEN 203) which provides introduction, knowledge and understanding of the dental materials commonly used in dental practice which may require use by the dental assistant, dental hygienist and dental technicians

**Required Texts:**

1. McCabe J. and Walls A. Applied Dental Materials 9th edition. Blackwell Publishers
2. Instructor Handouts

**Reference Texts:**

1. Van Noort R. (2002). Introduction to Dental Materials, second edition Publisher Mosby.
2. Anusavice, K.J. Science of dental materials. (1996). 10th edition. Philadelphia: W.B Saunders Co.
3. Finkbeiner, B.L., & Johnson, C.S. (1995) 1st edition. Comprehensive Dental Assisting. St. Louis: CV Mosby publishers.
4. Phillips R.W., & Moore B.K. (1994). 5th edition. Elements of dental materials for dental hygienists and dental assistants. Philadelphia: W.B. Saunders Co.

| Teaching & Learning Methods |
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| There will be one lab session for 3 hours every week during which a demonstration will be given for 30 minutes.<br>Students will be able to see and identify different dental materials during lab sessions |

| **Methods of Evaluation:** | **Percentage** |
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| Continuous assessment<br>Midterm exam | 40 %<br>20 % |
| Final practical exam | 40% |

| **General Course Objectives:** Upon the completion of this course, students will be able to: |
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| 1. Utilize safety procedures needed in the use of different dental materials |
| 2. Differentiate between the elastomeric impression materials and inelastic impression materials |
| 3. Recognize the various formulations of gypsum products |
| 4. Be familiar with the different types of metal alloys used in the dental practice |
| 5. Differentiate between the different types of dental cements, the indications and contraindications to use each one of them |
| 6. Determine the indications and selection of various restorative materials such amalgam, ceramics and composite materials. |
| 7. To be able to differentiate between different polishing agents and their specific indications in dental use. |

| Course content | | |
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| **Week** | **Lab. Subject** | **Areas of interest** |
| **26/9/2016** | **There will be no lab** | |
| 3/10/2016<br>10/10//2016 | Impression Materials | ▪ To identify different types of impression material, their properties, uses and the correct method of mixing them:<br>o Hydrocolloid systems<br>o Rubber systems<br>o Compound systems |
| 17/10//2016 | Gypsum | ▪ To identify different gypsum materials, their properties and how to mix them:<br>o Plaster<br>o Stone<br>o Die stone<br>o Investment material |
| 24/10//2016 | Waxes | ▪ To identify waxes used in dental laboratories and clinics and their properties |
| 31/10//2016 | Metal alloys | ▪ To identify different types of alloys like high noble, noble and base metal alloys. |
| 7/11//2016 | Polymers | ▪ To identify dental acrylic materials compositions and their properties used as:<br>o Denture base material<br>▪ Denture teeth |
| 14/11//2016 | Ceramics | ▪ To be familiar with the porcelain and its composition. |
| **21/11//2016** | **Midterm exam** | |
| 28/11//2016 | Amalgam | • To be familiar with the composition, different techniques usec in mixing amalgam, and to be familiar with amalgam capsules and the amalgamator. |
| 5/12//2016 | Composites | ▪ To identify composites and their properties and uses, identify the different types of composites (self cure or light cure). |
| 12/12//2016 | Cements | • To be able to differentiate between the different types of cements, their properties, indications and contraindications to use each one of them. |
| 19/12//2016 | Abrasives | ▪ To be familiar with the different types of abrasives used in dental practice along with their composition and specific uses. |
| **Final practical exam period** | **To be announced** | |

Continuous assessment will be evaluated on the basis of short exams (4 short exams with 10 marks each and a total of 40 marks) according to subjects given in the lab as follows:

| Additional Notes | |
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| **Exams** | Students are required to sit for the 4 short exams in addition to the Midterm and final practical exams. |
| **Cheating** | Cheating during exam will result in dismissal from the exam hall and the student will be penalized according to JUST regulations |
| **Attendance** | JUST requires the faculty member to assign ZERO grade (35%) if a student misses 20% of the classes with or without an excuse.<br>• Any student who is absent on a test day, will have to demonstrate an acceptable medical or social statement explaining the illness or personal crisis as instructed by their faculty<br>• No make-up exams or quizzes will be given for unexcused absences<br>• Individual instructors may accommodate by arrangements for a make-up test only when a written request is sent to and approved by the Dean. |
| **Feedback:** | Concerns or complaints should be expressed in the first instance to the course instructor. If no resolution is forthcoming then the issue should be brought to the attention of the Department Chair and if still unresolved to the Dean. Questions about the material covered in the lecture, notes on the content of the course, its teaching and assessment methods can be also sent by e-mail to the following address: *eqaltwal@just.edu.jo* |