# Course Specifications

| | |
|---|---|
| **Course Title:** | **Esthetic Dentistry** |
| **Course Code:** | **RDS 512** |
| **Program:** | **Bachelor of Dentistry [ BDS ]** |
| **Department:** | **Restorative Dental Sciences [RDS]** |
| **College:** | **College of Dentistry** |
| **Institution:** | **Majmaah University** |

## Table of Contents

## A. Course Identification

| |
|---|
| **1. Credit hours:**<br>**2**(1+1+0) |
| **2. Course type**<br>**a.** University ☐ College ☐ Department **X** Others ☐<br>**b.** Required **X** Elective ☐ |
| **3. Level/year at which this course is offered: 5th Year / 2nd Semester** |
| **4. Pre-requisites for this course** (if any)**: RDS 413** |
| **5. Co-requisites for this course** (if any)**:NA** |

**6. Mode of Instruction** (mark all that apply)

| No | Mode of Instruction | Contact Hours | Percentage |
|---|---|---|---|
| 1 | **Traditional classroom** | 15 | 25% |
| 2 | **Blended** | NA | NA |
| 3 | **E-learning** | NA | NA |
| 4 | **Correspondence** | NA | NA |
| 5 | **Other - Laboratory** | 45 | 75% |

**7. Actual Learning Hours** (based on academic semester)

| No | Activity | Learning Hours |
|---|---|---|
| **Contact Hours** | | |
| 1 | **Lecture** | **15** |
| 2 | **Laboratory/Studio** | **45** |
| 3 | **Tutorial** | **-** |
| 4 | **Others** (specify) | **-** |
| | **Total** | **60** |
| **Other Learning Hours*** | | |
| 1 | **Study** | **45** |
| 2 | **Assignments** | **15** |
| 3 | **Library** | **15** |
| 4 | **Projects/Research Essays/Theses** | **15** |
| 5 | **Others** (specify) | **-** |
| | **Total** | **90** |

* The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times

## B. Course Objectives and Learning Outcomes

### 1. Course Description

It is a one-year course, given as one hour lecture and one practical session of 3 hours in the 2nd semester of the same year. Esthetic Dentistry is a branch that deals with beauty in dentistry, a philosophy concerned especially with the appearance of a dental restoration, as achieved through its color or form

Esthetic Dentistry is one of the most important courses in dentistry where the student deals with simultaneous application of technical and artistic skills thus enabling them to achieve outstanding esthetic and functional results. They should also possess an intimate knowledge of the different esthetic materials available, and their clinical indications, application and limitations in practice.

To practice successful Esthetic dentistry, the dental team must understand the relevant principles, notably those of smile design, and be aware of the different inter-disciplinary treatment modalities that are available. An effective communication within the dental team, with the dental technologist and, in particular, the patient is of paramount importance to ensure that the goals of esthetic dentistry are achieved, including patient satisfaction and the avoidance of unmet, possibly unrealistic, expectations. All these elements underpin and provide the foundations for successful esthetic dentistry.

### 2. Course Main Objective

The main purpose of the course is that the students should be able to diagnose aesthetic cases and derive an appropriate treatment plan and to demonstrate proper skills in placement and finishing of the restoration so as to be in par with global standards in aesthetic treatment of patients and set a standard in aesthetic dentistry.

### 3. Course Learning Outcomes

| CLOs | | Aligned PLOs |
|---|---|---|
| 1 | **Knowledge:** | |
| K3.36 | Recognize cases which is of esthetic concern and arrive at a clinical diagnosis so as to restore the form and function of the tooth | K3 |
| K3.37 | Recall the concepts in esthetic dentistry and develop an appropriate treatment modality so as to restore the teeth to an acceptable level | |
| **2** | **Skills :** | |
| S3.21 | Critically analyze clinical and radiographic findings of cases and predict a suitable restorative material which would be appropriate during restorative treatment | S2 |
| S6.15 | To demonstrate hand-eye coordination so as to perform rubber dam isolation, demonstrate minimally invasive operative procedures including proper manipulation, placement and finishing of restorative materials so as to reconstruct and restore the tooth and rehabilitate the oral cavity. | S6 |
| **3** | **Competence:** | |
| C3.13 | Demonstrate communicative skills with the patients and coordinate with fellow colleagues to submit a group task or assignment and | C3 |

| CLOs | | Aligned PLOs |
|---|---|---|
| | justify the restorative material for the management of a clinical cases | |
| | | |

## C. Course Content

| No | List of Topics | Contact Hours |
|---|---|---|
| 1 | **Introduction to operative dentistry**<br>1. Introduction to 411 RDS course.<br>2. The course rules and regulations<br>3. Role of aesthetics in dentistry | 1 |
| 2 | **Concepts and Fundamentals of Esthetics. Part - I**<br>Goals of smile design<br>**1. Facial component**<br>- Proper alignment<br>- Facial symmetry<br>- Proportion of the face | 1 |
| 3 | **Concepts and Fundamentals of Esthetics. Part - II**<br>**2. Dental component**<br>**a) Tooth components**<br>- Dental midline<br>- incised length<br>- Tooth dimensions<br>- Zenith points<br>- Axial inclinations<br>- Contact area and contact point<br>- Incisal embrasures<br>- Sex,personality and age | 1 |
| 4 | **Concepts and Fundamentals of Esthetics. Part - III**<br>**b) Soft tissue components**<br>- Gingival health<br>- Gingival levels and harmony<br>- Interdental embrasure<br>- Smile line | 1 |
| 5 | **Color and Polychromatic Stratification.**<br>**Part - I**<br>1. Classification of colour<br>- Munsell System<br>- CIE L*a*b* system | 1 |
| 6 | **Color and Polychromatic Stratification.**<br>**Part – II**<br>**1.** Light and colors<br>**2.** Perception of color | 1 |
| 7 | **Color and Polychromatic Stratification.**<br>**Part - III**<br>**3.** Principles of shade matching<br>**4.** Shade Guides | 1 |
| 8 | **Treatment discoloured tooth. Part - I**<br>- Causes of discoloration | 1 |

| | | |
|---|---|---|
| | - Micro abrasion<br>- Macroabrasion | |
| 9 | **Treatment discoloured tooth. Part –II**<br>**Bleaching**<br>- Vital Bleaching<br>- Non vital bleaching. | 1 |
| 10 | **Conservative Esthetic Procedures**<br>**Diastema Closure**<br>**Veneers**<br>- Partial veneers<br>- Full veneers<br>**Putty Matrix technique** | 1 |
| 11 | **Indirect esthetic restorations. Part – I**<br>- Inlays<br>- Onlays<br>Modifications in preparations<br>comparison to conventional<br>preparations | 1 |
| 12 | **Indirect esthetic restorations. Part - II**<br>Impression techniques<br>CAD – CAM in esthetics | 1 |
| 13 | **Periodontal considerations in aesthetic dentistry**<br>- Gingivectomy<br>- Frenectomy<br>- Crown lengthening procedures<br>- Depigmentation<br>- Lip Augmentation | 1 |
| 14 | **Adjunctive Orthodontics related to aesthetic dentistry**<br>- Definition<br>- Goals of adjunctive treatment<br>- Alignment of anterior teeth<br>- Black triangles<br>- Gummy smile<br>- Therapeutic alternatives | 1 |
| 15 | **Surgical Esthetic techniques**<br>- Skin Resurfacing ( Re-epithilization)<br>- Dental Implants<br>- Alveolar distraction<br>- Skeleto-facial Procedures<br>- Bi-maxillary surgery<br>- Facelift | 1 |
| **Total** | | **15** |

## D. Teaching and Assessment

**1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods**

| Code | Course Learning Outcomes | Teaching Strategies | Assessment Methods |
|---|---|---|---|
| 1 | **Knowledge** | | |
| K3.36 | Recognize cases which is of | Lectures, Practical | Recall/Factual Questions in |

| Code | Course Learning Outcomes | Teaching Strategies | Assessment Methods |
|---|---|---|---|
| | esthetic concern and arrive at a clinical diagnosis so as to restore the form and function of the tooth | lab | Written exams , Oral evaluations, OSPE, Assignments |
| K3.37 | Recall the concepts in esthetic dentistry and develop an appropriate treatment modality so as to restore the teeth to an acceptable level | Lectures, Practical lab | Recall/Factual Questions in Written exams , Oral evaluations, OSPE, Assignments |
| **2** | **Skills :** | | |
| S3.21 | Critically analyze clinical and radiographic findings of cases and predict a suitable restorative material which would be appropriate during restorative treatment | Comprehensive case will be presented to students and they will be asked to formulate a treatment plan.<br><br>As well as lectures, clinics, case presentation & group research | Clinical cases related question will be discussed in the format of group discussion<br><br>Practical sessions |
| S6.15 | To demonstrate hand-eye coordination so as to perform rubber dam isolation, demonstrate minimally invasive operative procedures including proper manipulation, placement and finishing of restorative materials so as to reconstruct and restore the tooth and rehabilitate the oral cavity. | 1.Clinical training on isolation procedures, cavity preparations and placement of restorative materials.<br>2. Check list for self-assessment of the task, Individualized attention for correction of mistake & grading of the task.<br>3.Practical assignments where a specific time limit is given to the student | Hands-on examination of tooth preparation procedures, Selection of appropriate restorative material,<br>OSCE & Viva voce. |
| **3** | **Competence:** | | |
| C3.13 | Demonstrate communicative skills with the patients and coordinate with fellow colleagues to submit a group task or assignment and justify the restorative material for the management of a clinical cases | 1. Students will be assigned to a particular patient and will be held responsible –<br>2. Practical sessions with group discussion | The group task / Assignment will be supervised closely and the work done by each student will be evaluated using rubrics |

| Code | Course Learning Outcomes | Teaching Strategies | Assessment Methods |
|---|---|---|---|
| | | 3.Teach students how to deal with different patients' personalities and attitudes. | |

### 2. Assessment Tasks for Students

| # | Assessment task* | Week Due | Percentage of Total Assessment Score |
|---|---|---|---|
| 1 | Quiz | During the semester | 05% |
| 2 | Midterm written exam | Week 7 | 20% |
| 3 | Final written exam | End of the semester | 20% |
| 4 | Weekly Assessment | During the course | 25% |
| 5 | Research | During the semester | 05% |
| 6 | Behaviour and attitude | During the semester | 05% |
| 7 | Final Practical Exam | During the semester | 20% |
| | **Total** | | 100% |

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

## E. Student Academic Counseling and Support

**Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :**
The student shall avail the consultancy during the displayed office hours

## F. Learning Resources and Facilities

### 1. Learning Resources

| | |
|---|---|
| **Required Textbooks** | ✓ Contemporary Esthetic Dentistry : George A. Freedman , ELSEVIER …2012<br>✓ Sturdvents Art and Science of operative dentistry 5th edition. |
| **Essential References Materials** | ✓ Esthetics In Dentistry Second Edition - Ronald E.Goldstein – 2nd Edition.<br>✓ The 21 Principles of Smile Design - *Lee Ostler*<br>✓ Smile Design-Nicholas C. Davis, DDS, MAGD Dent Clin N Am 51 (2007) 299–318 |
| **Electronic Materials** | Recommended selected articles will be posted in the course webpage.<br>www.pubmed.com<br>Google<br>www.sciencedirect.com |

| | |
|---|---|
| **Other Learning Materials** | □Library<br>□Computers<br>□Projects<br>□Diagnostic instruments |

## 2. Facilities Required

| Item | Resources |
|---|---|
| **Accommodation**<br>(Classrooms, laboratories, demonstration rooms/labs, etc.) | ✓ Lecture room suitable for 30 students<br>✓ Fully equipped lab for practical sessions |
| **Technology Resources**<br>(AV, data show, Smart Board, software, etc.) | ✓ Projector<br>✓ Smart board with all the accessories<br>✓ Internet |
| **Other Resources**<br>(Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list) | ✓ Dental clinics<br>✓ Laboratory for fabrication of indirect restorations<br>✓ Sterilization equipment |

## G. Course Quality Evaluation

| Evaluation Areas/Issues | Evaluators | Evaluation Methods |
|---|---|---|
| Effectiveness of teaching and assessment | Students | ✓ Course Evaluation Survey<br>✓ Quality of Exam Survey |
| | Faculty | ✓ CLO Mapping with teaching & assessment.<br>✓ Course Blueprinting<br>✓ Grade Analysis<br>✓ Psychometric Analysis |
| | Peers | Grade Verification |
| Extent of achievement of course learning outcomes | Faculty member / Quality assurance committee | ✓ Direct assessment outcome analysis<br>✓ Course report preparation |
| Quality of learning resources, etc | Students / Faculty | ✓ Academic advising survey<br>✓ Student experience survey |

**Evaluation areas** (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
**Evaluators** (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
**Assessment Methods** (Direct, Indirect)

## H. Specification Approval Data

| | |
|---|---|
| **Council / Committee** | **Department Council** |
| **Reference No.** | ********** |

| | |
|---|---|
| **Date** | ********** |