

**Umm Al-Qura University**

**Faculty of Dentistry**

**Vice Deanship of Academic Development & Community Service**

وحدة تطوير المناهج

**Curriculum Development Unit**

**جامعــة أم القــرى**

**كلية طب الأسنان**

**وكالة الكلية للتطوير الأكاديمي وخدمة المجتمع**

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications**

**(CS)**

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| **Course Name** | Pain Control and anesthesia |
| **Course Code** | 190341003 |
| **Academic Level** | 4th Level |
| **Semester** |  1st |
| **Study Plan No** | 33 |
| **Department** | Oral & Maxillofacial Surgery & Rehabilitation |
| **Division** | Oral & Maxillofacial Surgery |
| **Academic Year** | 2018-2019 AD – 1439 -1440 AH |
| **Contact hours** | Theoretical | 1 / week |
| Practical | Non / week |
| Clinical | 2 / week |
| **Total Contact Hrs** | 3 / week |
| **Total Credit Hrs** | 2 |

 UQU-DENT:F0401-01/02

**Course Specifications**

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| Institution:  Umm Al Qura University Date of Report: 10/1/ 2018  |
| College/Department: College of Dentistry\Department: Oral and Maxillofacial Department  |

**A. Course Identification and General Information**

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| 1. Course title and code: Pain Control and anesthesia, Code: 190341003 |
| 2. Credit hours: 2 credits |
| 3. Program(s) in which the course is offered: Bachelor’s Degree of Dental Medicine and Surgery (B.D.S)(If general elective available in many programs indicate this rather than list programs) |
| 4. Name of faculty member responsible for the course: Ass Prof. Hanan Shokier  |
| 5. Level/year at which this course is offered: 4th year (First semester). |
| 6. Pre-requisites for this course (if any): Successful completion of third year courses. |
| 7. Co-requisites for this course (if any): Oral medicine II, Preclinical endodontics, Cariology, Operative dentistry, Preclinical removable prosthodontics, Preclinical fixed prosthodontics, and Periodontology II are simultaneously implemented. |
| 8. Location if not on main campus: This course is offered in the main campus at Al-Abedia Area. |
| 9. Mode of Instruction (mark all that apply)Yes60% a. Traditional classroom What percentage?  b. Blended (traditional and online) What percentage? c. e-learning What percentage? d. Correspondence What percentage? e. Others What percentage?40%YesComments:1. Traditional classroom in the form of face to face interactive lectures.

 e. Others: Practical sessions for demonstrations of the different techniques of local anesthesia. |

**B Objectives**

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| 1. **What is the main purpose for this course?**

This course aims to teach the students an overview of spectrum of pain and anxiety control in dentistry. Also to teach the students different types of local anesthetics drugs and techniques, and how to clinically administrate them.  |
| **2. Plans for developing and improving the course that are being implemented:** 2.1. More focusing on electronic learning through using features of JUSUR system of the National. Center for e-learning& King Abdullah Digital Library.2.2. Supplying every 2 students with dental chair unit and complete set of armamentarium for practical training on different anesthetic techniques.2.3. Change in content as a result of new research in the field. 2.4. Using rubrics (analytic scoring rubrics) as objective assessment tools for evaluating students' assignments & presentations. 2.5. Implementing OSPE in practical exams. |

**C. Course Description**

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| Topics to be Covered in lectures |
| List of topics | No of weeks | Contact hours |
| 1.Anatomical considerations(maxillary and mandibular nerves) | 1 week | 1 hr |
| 2. Armamentarium for local anesthetic techniques. | 1 week | 1hr |
| 4.Local anesthetic techniques in mandible (Infiltration technique & Nerve block techniques) | 2 weeks | 2 hrs |
| 5.Local anesthetic techniques in maxilla (Infiltration technique & Nerve block technique) | 2 weeks | 2 hrs |
| 6. Neurophysiology. | 1 week |  1hr |
| 7.Local anesthetic drugs | 3 weeks | 3 hrs |
| 8.Local Complications of local anesthesia | 2 week | 2 hrs |
| 9.Systemic Complications of local anesthesia | 1 week | 1 hr |
| Total  | 13 weeks |  13 hrs |

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| Topics to be Covered in practical sessions |
| List of topics | No of week | Contact hours |
| 1. Anatomical considerations (maxillary and mandibular nerve), innervations for upper and lower dental arch. | 1 week | 2 hrs |
| 3. Armamentarium for local anesthetic techniques, training on anesthetic loading and how to get the syringe aspirating. | 1 week | 2hrs |
| 4. Demonstration on local anesthetic techniques in mandible (buccal and lingual Infiltration techniques for lower anterior. | 1 week | 2 hrs |
| 5. Demonstration on inferior alveolar nerve block and long buccal nerve infiltration, block techniques for lower posterior teeth.. | 1 week | 2 hrs |
| 6. Demonstration on local anesthetic techniques in maxilla (buccal Infiltration technique for anterior and posterior teeth) | 1 week | 2 hrs |
| 7. Demonstration on local anesthetic techniques in maxilla (palatal infiltration technique for anterior and posterior teeth) | 1 week | 2 hrs |
| 8. Training on mandibular nerve block techniques. | 2 week | 2 hrs |
| 8. Training on maxillary infiltration techniques. | 2 weeks | 4 hrs |
| 9. Revision on both max and mand techniques. | 3 weeks | 2 hrs. |
| 10. Final practical exam. | 1 week |  2 hrs.  |
| Total  | 14 weeks | 42 hrs |

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| 2. Course components (total contact hours and credits per semester):  |
|  | Lecture | Tutorial | Laboratory | Practical | Other: | Total |
| ContactHours | 13 hours |  |  |  28 hours |  | 41 hours |
| Credit | 1 hour |  |  | 1 hour |  | 2 hours |

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| 3. Additional private study/learning hours expected for students per week. :2 hours/week |

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| 4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy |

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The ***National Qualification Framework*** provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

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|  | **NQF Learning Domains** **And Course Learning Outcomes** | **Course Teaching****Strategies** | **Course Assessment****Methods** |
| **1.0** | **Knowledge** |
| 1.1 | Recognize basics of anatomical considerations, armamentarium, and pharmacology related to local anesthetic techniques used in oral field  | Interactive lecturesPractical sessions | Quiz I Mid-course written exam.Final course written exam.Final OSPE |
| 1.2 | Describe basic anesthetic techniques used in oral field. |
| 1.3 | Outline local & systemic complications related to the basic anesthetic techniques used in oral field. |
| **2.0** | **Cognitive Skills:** |
| 2.1 | Correlate between the desired treatment plan and the anatomical consideration and pharmacology to select the proper Anesthetic technique.  | Interactive lecture Practical sessions |  Quiz I Mid-course written exam.Final course written exam.Assessment of Clinical requirements.Final OSPE |
| 2.2 | Analyze the etiological factors of different local and systemic complications of local anesthesia for prevention and management.  |
| **3.0** | **Interpersonal Skills & Responsibility** |
| 3.1 | Use proper communication skills with the patient and dental staff during treatment sessions. | Clinical sessionsInteractive lecture  | Clinical exam using RubricWritten exam. |
| **4.0** | **Communication, Information Technology, Numerical** |
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| **5.0** | **Psychomotor** |
| 5.1 | Operate intraoral mandibular and maxillary local anesthetic techniques. | Clinical sessions | Clinical exam using Rubric |

**Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching**

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| **NQF Learning Domains** | **Suggested Verbs** |
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| **Knowledge** | list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write |
| **Cognitive Skills** | estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise |
| **Interpersonal Skills & Responsibility** | demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write |
| **Communication, Information** **Technology, Numerical** | demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize |
| **Psychomotor** | demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct |

Suggested ***verbs not to use*** when writing measurable and assessable learning outcomes are as follows:

Consider Maximize Continue Review Ensure Enlarge Understand

Maintain Reflect Examine Strengthen Explore Encourage Deepen

Some of these verbs can be used if tied to specific actions or quantification.

**Suggested assessment methods and teaching strategies are:**

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

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| 5. Schedule of Assessment Tasks for Students During the Semester |
|  | Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.) | Week Due | Proportion of Total Assessment |
| 1 | 1st quiz | 5**th** week | 10% |
| 2 | Mid-term( MCQ) | 10th week | 25% |
| 3 | OSPE | 10th week | 5% |
| 4 | Continuous evaluation | 12th weeks | 10% |
| 5 | Final course written examination (MCQ’s, written) | 15th week | 30% |
| 6 | Clinical examination | 15th week | 20% |
| Total |  | 100% |

**D. Student Academic Counseling and Support**

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| 1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

Faculty and teaching staff of this course are available at least 4 hrs. /week (according to allocated office hours) for individual student consultation and academic advice. All contact information for faculty and teaching staff are written in the course outline. |

**E. Learning Resources**

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| 1. Required text :

Stanley F Malamed, Christine L. Quinn .Handbook of local anesthesia, 6th ed. St. louis: Mosby; 2012. |
| 1. Journals, Reports

[Oral and maxillofacial surgery - Wikipedia, the free encyclopaedia](http://www.google.com.sa/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CEUQFjAA&url=http%3A%2F%2Fen.wikipedia.org%2Fwiki%2FOral_and_maxillofacial_surgery&ei=bWegUpj7KaPpywPC6oDIDQ&usg=AFQjCNGQo1o75IgD4iIuz2jvt8TCKwKznQ). [Oral and Maxillofacial Surgery - Springer](http://link.springer.com/journal/10006). Available at http://www.springer.com/medicine/ surgery/journal/10006. |
| 3. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)3.1. Stanley F Malamed, Christine L. Quinn : Handbook of local anesthesia *2012* available at :<http://www.goodreads.com/author/show/268242.Stanley_F_Malamed> Accessed April 4, 2012)3.2.Stanley F Malamed, Christine L. Quinn : Handbook of local anesthesia *2012* available at : *http://www.youtube.com/watch?v=OP6EX7T4S9Y*Accessed April 4, 2012)3.3. Association of Oral and Maxillofacial Surgeons (AAOMS). Available at http://www.aaoms.org/ |
| 3.4. Other learning material such as computer-based programs/CD, professional standards or regulations and software .power point presentations of the lectures  |

**F. Facilities Required**

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| Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.) |
| 1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

1.1 Classrooms:Each teaching classroom in the faculty is large enough to accommodate 60 students at one time & it includes enough number of comfortable seats arranged in rows with spaces between them. These classrooms are supplied with audiovisual equipment, data show, a large screen, screen pointers & other equipment needed for the Power Point presentation of lectures. 1.2 Clinics and wards:Fully equipped clinical cubicles and provision of all material needed for any procedure pertaining to oral surgery treatment. |
| 1. Computing resources (AV, data show, Smart Board, software, etc.)

All students have the opportunity to use computer with internet access in a comfortable place. This will enable the students to search for the learning issues of the PBL and SDL tutorials. |
| 3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) Study areas for students to revise their lessons.  |

**G Course Evaluation and Improvement Processes**

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| 1. Strategies for Obtaining Student Feedback on Effectiveness of Teaching

1.1 course evaluation questionnaire is designed to assess the effectiveness of the course regarding objectives, teaching facilities, instructor, assessment process and resources. It is distributed to all the students at the end of the course, data is analyzed, interpreted and discussed by the course director or committee in order to issue an improvement plan for any difficulties facing the students.1.2. Focus group discussion with the students to validate the questionnaire results. |
| 2. Other Strategies for Evaluation of Teaching by the Program/Department Instructor2.1. A course evaluation questionnaire is designed to assess the effectiveness of the course. It is distributed to instructors who participated in teaching the course at the end of the semester, data is analyzed, interpreted and discussed by the course director or committee.2.2. An annual course report is compiled by the course director or committee in light of the results of students’ performance as well the results of the course evaluation questionnaire by students. |
| 3. Processes for Improvement of Teaching3.1. Double checking of the students answers by two raters or evaluators.3.2. External examiners recruitment is helpful for verifying students' performance. |
| 4.Processes for Verifying Standards of Student Achievement 4.1. Check marking by an independent member teaching staff of a sample of student work.4.2. Periodic exchange and remarking of tests or a sample of assignments with staff at another institution) |

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| 5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.The course is revised annually after its delivery in light of the results of students' performance (students' grades) and the results of the course evaluation questionnaire by both students and teaching staff. The course director or committee discusses these issues and put an improvement plan for each spotted problem. They revise the course content and intended learning objectives. Any changes in objectives, teaching strategies or assessment methods should be documented in the course specification of the next year. Major changes should not be considered except after being approved by the curriculum committee. |

* **Faculty or Teaching Staff: Faculty or teaching staff:**

 **Signature**

Prof. Dr. Hanan Shokier

Prof.Dr. Alla Mekky

Prof. Dr. Reda Nofal

Prof Dr. Hassen Hazzazi

Prof .Dr Mohamed Hassen

**Date Report Completed:**

**Received by: prof Dr** Alla Mekky **Department Head**

**Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**