

**Umm Al-Qura University**

**Faculty of Dentistry**

وحدة تطوير المناهج

**Curriculum Development Unit**

**جامعــة أم القــرى**

**كلية طب الأسنان**

**Kingdom of Saudi Arabia**

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

**Course Specifications**

**(CS)**

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| **Course Name** | Pediatric Dentistry | |
| **Course Code** | 19 02 521 05 | |
| **Academic Level** | 5th Level | |
| **Semester** | 1st & 2nd | |
| **Study Plan No** | 33 | |
| **Department** | Preventive Dentistry | |
| **Division** | Pediatric Dentistry | |
| **Academic Year** | 2018-2019 AD – 1439 -1440 AH | |
| **Contact hours** | Theoretical | 2 / week |
| Practical | 3 / week (1st semester) |
| Clinical | 3 / week (2nd semester) |
| **Total Contact Hrs** | 5 / week | |
| **Total Credit Hrs** | 7 | |

UQU-DENT:F0401-01/02

**Course Specifications**

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| Institution: Umm Al Qura University Date of Report: 25/11/2018 |
| College/Department: Faculty of Dentistry, Department of Preventive Dentistry, Division of Pediatric Dentistry. |

**A. Course Identification and General Information**

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| 1. Course title and code: **Pediatric Dentistry (19 02 521 05)** |
| 2. Credit hours: 7 credits |
| 3. Program(s) in which the course is offered.  Bachelor Degree of Dental Medicine and Surgery  (B.D.S.). |
| 4. Name of faculty member responsible for the course: Dr. Abla A. Arafa |
| 5. Level/year at which this course is offered: Fifth year (first and second Semesters). |
| 6. Pre-requisites for this course :Successful Completion of Fourth Year |
| 7. Location if not on main campus: this course is offered in the main campus at Al-Abedia Area. |
| 8. Mode of Instruction (mark all that apply)  yes  35%  a. Traditional classroom What percentage?  ---  ---  b. Blended (traditional and online) What percentage?  ---  ---  c. e-learning What percentage?  ---  ---  d. Correspondence What percentage?  yes  65%  e. Other What percentage?  Comments:  a. Traditional classroom in the form of face to face interactive lectures.  b. Other includes: computer based group assignment, practical and clinical sessions. |

**B Objectives**

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| 1. What is the main purpose for this course?  The course aims to familiarize students with diagnosis and treatment of different dental and oral diseases/disorder in children with further application of different management modalities of child patient in dental practice. Through the clinical sessions, the students will be guided to offer comprehensive dental care for children and adolescent with emphasis on treatment planning and interceptive orthodontic intervention. |
| 2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)  2.1 Specifying assignment to students based on searches on electronic scientific journals related to the course.  2.2Using rubrics (analytic scoring rubrics) as objective assessment tools for evaluating students' assignments & presentations.  2.3Implementing OSCE in clinical exams.  2.4change in course content based on new research in the field. |

**C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)**

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| 1. Topics to be Covered | | | |
| List of Topics | | No. of  Weeks | Contact Hours |
| 1 | Introduction to Pediatric Dentistry | 1 | 2 |
| 2 | Shedding of Primary Teeth | 1 | 2 |
| 3 | Eruption of teeth | 1 | 2 |
| 4 | Morphological Differences Between Primary &Permanent Dentitions | 3 | 6 |
| 5 | Psychological Management of Child Behavior | 3 | 6 |
| 6 | Pain reaction control: sedation | 1 | 2 |
| 7 | Restorative dentistry for the primary dentition and Stainless Steel crown preparation | 3 | 6 |
| 8 | Management of deep carious lesion in children | 3 | 6 |
| 9 | Oral Surgery in Children | 1 | 2 |
| 10 | Dental Management of Children with special needs | 3 | 6 |
| 11 | Periodontal Problems in Children and Adolescents | 2 | 4 |
| 12 | Space Maintenance in Primary Dentition | 3 | 6 |
| 13 | Managing Traumatic Injuries in Primary and Young Permanent Dentitions | 3 | 6 |
|  | Total | 28 | 56 hrs. |

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| 2. Course components (total contact hours and credits per semester): | | | | | | |
|  | Lecture | Tutorial | Laboratory | Practical(Clinical) | Other: | Total |
| Contact  Hours | 56 |  | 42  (first semester) | 42  (second semester) |  | 140 hrs. |
| Credit | 4 |  | 1.5 | 1.5 |  | 7 Credits |

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| 3. Additional private study/learning hours expected for students per week.  4 hrs./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 anatomical and behavioral differences between children and adults related to the field of dentistry. | Interactive lecture  Group assignment  Case based learning | | Quiz 1  Practical exam  Midyear written exam Quiz 2  Final clinical exam  Final OSCE  Final written  Assessment of the group assignment presentation using rubric. |
| 1.2 | Identify diagnostic modalities for children and Describe differences in the clinical and radiographic findings of most common oral and dental diseases between children and adults. |
| 1.3 | Recognize different treatment modalities for children. |
| **2.0** | **Cognitive Skills** | | | |
| 2.1 | Correlate anatomical and behavioral differences with diagnostic finding to reach the proper treatment plan | Interactive lecture  Group assignment  Case based learning | Quiz 1  Practical exam  Mid yr written exam  Quiz 2  Final clinical exam  Final OSCE  Final written  Assessment of the group assignment presentation using rubric. | |
| **3.0** | **Interpersonal Skills & Responsibility** | | | |
| 3.1 | Operate in both scientific& professional contexts & Work effectively in team. | Group assignment  Practical and clinical sessions. | Assessment of the group assignment presentation using rubric.  Assessment of practical and clinical exam using rubric. | |
| **4.0** | **Communication, Information Technology, Numerical** | | | |
| 4.1 | Use information technology as a mean of communication. | Group assignment | Assessment of the group assignment presentation using rubric. | |
| **5.0** | **Psychomotor** | | | |
| 5.1 | Perform appropriate cavity preparations, stainless steel crown and pulp therapy procedures in phantom lab and dental clinic. | Practical and clinical sessions. | Assessment of practical and 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 | 9th Week | 2.5% |
| 2 | Continuous Evaluation (practical requirement, group assignment) | 16th Week | 10% |
| 3 | Mid-Year Examination (Practical 10%, Written 15%) | 18th-20th Week | 25% |
| 4 | 2nd Quiz | 29th Week | 2.5% |
| 5 | Continuous Evaluation (clinical requirement, group assignment) | 35th Week | 10% |
| 6 | Final Clinical Exam | 36th Week | 5% |
| 7 | Final Exam (Written 25%, OSCE 20%) | 37th and 38th Weeks | 45% |

**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)  Minimum 1staff to 5 students  Academic advice 4 hrs./week. |

**E. Learning Resources**

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| 1. List Required Textbooks  1.1) McDonald RE, Avery DR. Dentistry for the Child and Adolescent. 9th ed. St. Louis: Mosby; 2010.  1.2) Cameron AC, Widmer RP. Handbook of Pediatric Dentistry. 4th ed. St. Louis: Mosby; 2013. |
| 2. List Essential References Materials (Journals, Reports, etc.)  2.1) Pinkham JR, Cassamassimo PS, Fields HW, McTigue DJ, Nowak AJ. Pediatric Dentistry: Infancy through Adolescence. 5th ed. Saunders; 2013 |
| 3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)  3.1. Seale S. (Editor of Pediatric dentistry journal) available at: http://www.aapd.org/publications/ last update 2017, last accessed 04/10/2018.  3.2. Chris Deery (Editor of International journal of pediatric dentistry) available at: http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1365-263X last update 2016, last accessed 04/10/2018.  3.3. Beighton D (Editor of Journal of caries research) available at: https://www.karger.com/journal/EditorialBoard/224219, last update 2017, last accessed 04/10/2018. |
| 4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)  Web site:  4.1. PerrinJM(PresidentofAmericanacademyofPediatricDentistry) available at: http://www.aapd.org/media/Policies\_Guidelines/G\_Pulp.pdf / last update 2014, last accessed 04/10/2018.  4.2. Perrin JM (President of American academy of Pediatric Dentistry) available at: http://www.aapd.org/media/policies\_guidelines/e\_radiographs.pdf/ last update 2012, last accessed 04/10/2018.  4.3. PerrinJM(PresidentofAmericanacademyofPediatricDentistry) available at http://www.aapd.org/media/Policies\_Guidelines/E\_PeriodontalDisease.pdf last update 2004, last accessed 04/10/2018.  4.4. Perrin JM (PresidentofAmericanacademyofPediatricDentistry) available at: http://www.aapd.org/media/Policies\_Guidelines/G\_DevelopDentition.pdf last update 2014, last accessed 04/10/2018.  4.5. Cobourne M (editor of The Scottish Intercollegiate Guideline Network) available at http://www.aapd.org/media/Policies\_Guidelines/G\_OralSurgery.pdf last update 2015, last accessed 04/10/2018. |
| 5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.  5.1. Power Point presentations of lectures and lectures specifications showing learning outcomes & key words of each lecture are given to students and electronically uploaded to My UQUDENT website. |

**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: The accommodation required for the teaching of this course includes the following:  1.1. Classrooms: Each teaching classroom in the faculty is large enough to accommodate 90 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 PowerPoint presentation of lectures.  1.2. Phantom Lab: Phantom lab equipped with pediatric typodonts and all the equipment needed for operative procedures, pulpotomies and stainless steel crown preparation.  1.3. Dental Clinics: Dental clinics for pediatric patients and all the equipment needed for restorative and surgical procedures. |

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| 2. 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)  3.1. Other resources: (specify --eg. If specific laboratory equipment is required, list requirements or attach list).  3.1.1. Study areas for students to revise their lessons.  3.1.2. The used typodonts deciduous model teeth are with pulp chamber filled with red wax to show through if approached too closely during preparation and to be used during pulpotomy exercises. 3.1.3.The provision of “quiet room” that enables good guidance and demonstration of behavior management and technical skills as well as separation of un-cooperative child patient |

**G Course Evaluation and Improvement Processes**

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| 1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching  1.1. A 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 Instructor  2.1. 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 student's performance as well the results of the course evaluation questionnaire by students. |
| 3 Processes for Improvement of Teaching  3.1. Attending training sessions &Workshops for staff development.  3.2. Self &student assessment of the teaching methods.  3.3. Scheduling regular meetings with other colleagues where problems are discussed &solutions are given.  3.4. Discussing the challenges in the classroom with colleagues &department members.  3.5. Encouraging faculty members to attend conferences on professional development.  3.6. Keeping up to date with referred articles &books related to the topics of the course. |
| 4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)  4.1. Double checking of the students answers by two raters or evaluators.  4.2. External examiners recruitment is helpful for verifying students' performance |

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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 Teaching Staff:**

Dr Walid Fouad, Associate Professor of Pediatric Dentistry.

Dr Adel H. Fathy, Associate Professor of Pediatric Dentistry

Dr. Abla A. Arafa, Assistant Professor of Pediatric Dentistry.

Dr Shrief Hassan, Assistant Professor of Oral Biology.

Dr Zeinab Abol Wafa, Lecturer of Oral Biology.

**Course Coordinator: Name: Dr Abla A. Arafa**

**Signature: Abla Arafa**

**Date Report Completed:** 25/11/2018