

**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** | Research Project  |
| **Course Code** | 190261604 |
| **Academic Level** | 6th Level |
| **Semester** | 1st and 2nd  |
| **Study Plan No** | 33 |
| **Department** | Preventive Dentistry |
| **Division** |  |
| **Academic Year** | 2018-2019 AD – 1439 -1440 AH |
| **Contact hours** | Theoretical | 4/ week |
| Practical | Non / week |
| Clinical | Non / week |
| **Total Contact Hrs** | 4 / week |
| **Total Credit Hrs** | 8 |

 UQU-DENT:F0401-01/02

**Course Specifications**

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| Institution:Umm Al-Qura University Date of Report: 10/12/2018  |
| College/Department: College of Dentistry/ Preventive Dentistry |

**A. Course Identification and General Information**

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| 1. Course title and code:Research Project /190261604 |
| 2. Credit hours: 8 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. Khalid Aboalshamat |
| **5. Level/year at which this course is offered:** Sixth yearl/ full year |
| **6. Pre-requisites for this course**: Successful completion of fifth year/ Biostatistics course  |
| **7. Location**: This course is offered in the main campus at Al-Abedia Area |
| **8. Mode of Instruction** ------------ a. Traditional classroom What percentage? 50%Yes----------- b. Blended (traditional and online) What percentage? c. e-learning What percentage?----------------- d. Correspondence What percentage? e. Other What percentage?50%YesComments: **b. Blended**: Uploading the lectures to the university E-learning website.**e. Others:** Tutorial sessions to supervise and advise the students during the course of their research.  |

**B Objectives**

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| **1. Aims of the course :**The course is based on a small research project involving two semesters of research work. The aim is to conduct an academic research in a group of four or independently. The project gives students the opportunity to apply the basic research skills gained throughout the research courses given during his study years. The course will improve their rearch skills in the dental science and motivate them for further research based practical life. |
| 1. Briefly describe any plans for developing and improving the course that are being implemented.
	1. Focusing more on electronic learning through using King Abdullah Digital Library.

1.2. Implementing interactive lectures & increasing the time for discussion with students. |

**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. ofWeeks | Contact Hours |
| 1. Introduction to Research (L)
 | 2 weeks | 8 hrs. |
| 1. Research topics choice & funding (L)
 | 4 weeks | 16 hrs. |
| 1. Describing student logbook & official logbook (L)
 | 1 week | 4 hrs. |
| 1. Research ethics and Applying for ethical approval, laboratory & clinical permission (L)
 | 2 weeks | 8 hrs. |
| 1. Introduction to the online site (L)
 | 1 week | 4 hrs. |
| 1. Designing a protocol (L)
 | 1 week | 4 hrs. |
| 1. Biostatistics Course Revision
 | 1 week | 4 hrs. |
| 1. References, plagiarism & grammar (L)
 | 1 week | 4 hrs. |
| 1. How to present the final article(L)
 | 1 week | 4 hrs. |
| 1. Research progress discussion
 | 4weeks | 16 hrs. |
| 1. Annual research day presentations preparation
 | 1 week | 4 hrs. |
| 1. Research problems faced discussions
 | 4 weeks | 16 hrs. |
| 1. Presentation of Results
 | 1 week | 4 hrs. |
| 1. Interpretation of Results
 | 1 week | 4 hrs. |
| 1. Discussions and Conclusions
 | 1 week | 4 hrs. |
| 1. Reviewing
 | 2 weeks | 8 hrs |
| Total  | 28 weeks | 112 hrs |

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| 2. Course components (total contact hours and credits per semester):  |
|  | Lecture | Tutorial | Laboratory | Practical | Other: | Total |
| ContactHours | 112 hrs |  |  |  |  | 112 hrs |
| Credit | 8 |  |  |  |  | 8 Credits |

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| 3. Additional private study/learning hours expected of students / week. 4hrs/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** |
| **2.0** | **Cognitive Skills** |
| 2.1 | Create appropriate study design and statistical methods for analyzing data. | Lectures.Class work and in class discussions.Conduct scientific research. Poster preparation  | Delivery of research milestones and final article using rubrics.Poster and oral presentation evaluated using rubric. |
| 2.2 | Develop skills of how to apply for ethical approval  |
| 2.3 | Develop proper data collection and documentation skills of varius steps of his own research. |
| 2.4 | Analyze and interpret quantitative/qualitative results to summarize the research outcome. |
| 2.5 | Write the final article following the scientific guidelines. |
| **3.0** | **Interpersonal Skills & Responsibility** |
| 3.1 | Work effectively with the research group.  | Class work and in class discussions.Conduct scientific research. Poster preparation. | Delivery of research milestones and final article using rubrics.Poster and oral presentation evaluated using rubric. |
| 3.2 | Demonstrate punctuality during the course of the research in terms of logbook and assignments deadline.  |
| **4.0** | **Communication, Information Technology, Numerical** |
| 4.1 | Gather authorized and reliable scientific information from medical web sites | Conduct scientific research.Poster preparation. | Delivery of research milestones and final article using rubrics .Poster and oral presentation evaluated using rubric. |
| **5.0** | **Psychomotor** |

**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 |

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| Suggested ***verbs not to use*** when writing measurable and assessable learning outcomes are as follows:Consider Maximize Continue Review Ensure Enlarge UnderstandMaintain 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.  |
| **5. Schedule of Assessment Tasks for Students During the Semester** |
|  | **Assessment task**  | **Week Due** | **Proportion of Total Assessment** |
| 1 | Proposal + IRB ethical approval | 8 Nov. 2018 | 40% |
| 2 | Data collection | 24 Jan. 2019 | 10% |
| 3 | Data analysis | 14 Feb. 2019 | 10% |
| 4 | Supervisor marking | 29 Nov. 20184 Apr. 2019 | 10% |
| 5 | Poster presentation | 14 Mar. 2019 | 5% |
| 6 | Oral exam | 28 Mar. 2019 | 10% |
| 7 | Final document submission | 4 Apr. 2019 | 10% |
| 8 | Avoiding plagirism and delay submission | 4 Apr. 2019 | 5% |
| 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. **List Required Textbooks**

1.1. Fraunhofer AV: Research writing in dentistry. 1st ed. Blackwell. 2010. 1.2. Bland, M . *Introduction to Medical Statistics.* 3rd ed. Oxford University Press.2000.1.3. Peat J and Barton. B Medical Statistics. *A guide to data analysis and critical appraisal*. Blackwell publishing, 2005.1.4. Kirkwood B.R. and Sterne. J.A.C. *Essential Medical Statistics*. 2nd edition. Blackwell Science, 2003. |
| 1. **List Essential References Materials**

2.1. Sikri V and Sikri P: Community dentistry, 1st ed. CBS 2007.2.2. Motulsky H: Statistical guide, 3rd ed. Graph Pad 2005. |
| 1. **List Recommended Textbooks and Reference Material**

3.1. Moganstein W and Gluk G: Community Dental Health, 5th ed. Mosby 2003.3.2. Kinghton HT: An Evaluation of Clinical Research in Dentistry. J dent Res. 39: 649. 1990. |
| 1. **List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.**
	1. Ronald A. What is a P-value? Available at [http://galton.uchicago.edu/~thisted/Distribute/ pvalue.pdf](http://galton.uchicago.edu/~thisted/Distribute/%20pvalue.pdf) published February 2010. Accessed on 21December 2013.
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| 5. **Other learning material such as computer-based programs/CD, professional standards or regulations and software**.Statistical program and internet services  |

**F. Facilities Required**

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| 1. **Accommodation**
2. **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 equipments, data show, a large screen, screen pointers & other equipments needed for the Power Point Presentation of lectures. b. **Meeting rooms:**  This should be available for the students when needed to meet with the supervisor.**2. Laboratory:** Accessibility to all lab facilities should be allowed as the students will be allocated to different laboratories depending on the nature of their projects (cell culture, microbiology, histopathology etc..).**3. Computing resources:**All students have the opportunity to use computer with internet access in a comfortable place. They will need to spend long hours accessing the digital libraries and working on their projects.**4. Other resources**:Research room for the students to work. |

**G Course Evaluation and Improvement Processes**

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

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 are 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 are 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 Teaching*** 1. Self and student assessment of the teaching methods.
	2. Review of recommended teaching strategies.
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| 1. **Processes for Verifying Standards of Student Achievement**
	1. Double checking of the students answers by two raters or evaluators.
	2. External examiner 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.*** 1. 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.
	2. The course director or committee discusses these issues and put an improvement plan for each spotted the 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.
	3. Regular meeting for the staff members teaching the course to discuss improvement at least one time/semester.
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**Faculty or Teaching Staff:**  **Signature**

**Dr.**  **Khalid Aboalshamat       Assist. Prof. of dental public health**

**Date Report Completed:** 10/12/2018

**Received by: Head of Department of Preventive Dentistry**

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