



Umm Al-Qura University
Faculty of Dentistry
Vice Deanship
of Academic Development
& Community Service

وحدة تطوير المناهج
Curriculum Development Unit

جامعة أم القرى
كلية طب الأسنان
وكالة الكلية للتطوير الأكاديمي
وخدمة المجتمع



Kingdom of Saudi Arabia

The National Commission for Academic Accreditation & Assessment

Course Specifications
(CS, 2017)

Course Name	Basic Medical Sciences II	
Course Code	190120223	
Academic Level	2 nd Level	
Semester	2 nd	
Study Plan No	33	
Department	Basic & Clinical Oral Sciences	
Division	Basic Medical Sciences	
Academic Year	2018-2019 AD – 1439 -1440 AH	
Contact hours	Theoretical	17 / week
	Practical	6 / week
	Clinical	Non / week
Total Contact Hrs	23 / week	
Total Credit Hrs	20	



Course Specifications of Basic Medical Sciences II, 2016

Institution: Umm Al-Qura University	Date of Report: 19 /12/2018
College/Department : College of Dentistry	

A. Course Identification and General Information

1. Course title and code: Basic Medical Sciences II. Code number: 190120223			
2. Credit hours: 20 hrs.			
3. Program(s) in which the course is offered. BDS (If general elective available in many programs indicate this rather than list programs)			
4. Name of faculty member responsible for the course: Dr. Ali Alatar			
5. Level/year at which this course is offered: 2nd year dentistry. 2nd semester			
6. Pre-requisites for this course (if any): Completion successfully of 1st year course			
7. Location if not on main campus			
8. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="%65"/>
b. Blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. Correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
e. Others	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="%35"/>
Comments:			
a. Traditional classroom in the form of face to face interactive lectures.			
e. Others include:			
1. Problem based learning (PBL) sessions.			
2. Student's presentation.			
3. Practical sessions.			



B Objectives

1. What is the main purpose for this course? To allow students to study the medical basic sciences in order to understand the principles of most common medical problems in Saudi community and apply this for patient care during his practice of dentistry.
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 Increased use of IT or web based reference material like King Abdullah digital library, and other web based resources e.g. Springer Link, Wiley online. 2.2 Changes in content as a result of new research in the field. 2.3 Encourage the continuity of PBL method of learning

1. Topics to be Covered						
List of Topics	No. of weeks	Contact Hours				
		Lectures	Tutorial	Practical	Total	
1. Respiratory system module:	1.1 Bronchial Asthma	1 week	17h	4h	2h	23h
	1.2 Infection of lower respiratory tract	1 week	17h	4h	2h	23h
2. Renal system module		1 week	17h	4h	2h	23h
3. Musculoskeletal system module	3.1 Osteoporosis	2 weeks	17h 17h	4h 4h	2h 2h	23h 23h
	3.2 Rheumatoid arthritis	1 week	17h	4h	2h	23h
4. Central nervous system	4.1 Neuropathy (Facial palsy)	1 week	17h	4h	2h	23h
	4.2 Meningitis	1 week	17h	4h	2h	23h
	4.3 Stroke	1 week	17h	4h	2h	23h
	4.4 Epilepsy	1 week	17h	4h	2h	23h
5. Endocrine system module	5.1 Addison disease	1 week	17h	4h	2h	23h
	5.2 Thyroid gland	1 week	17h	4h	2h	23h
	5.3 Diabetes mellitus	1 week	17h	4h	2h	23h

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Others	Total
Contact Hours	238	56	-----	28	-----	322
Credit hours	17	2 hrs	-----	1 hrs	-----	20 hrs.

3. Additional private study/learning hours expected for students per week.	10 hrs.
--	---------



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.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Identify the normal structure, biochemistry and function of the studied body systems (respiratory, renal, musculoskeletal, endocrine and nervous system).	- Interactive lectures. - Practical sessions.	- End module objective type exams. - Final written objective type, short essay and OSPE exams.
1.2	Describe the etiology, pathogenesis, microbiology, and pharmacology case studies related diseases affecting of studied body systems.		
2.0	Cognitive Skills		
2.1	Anticipate the outcome of studied disorders based upon the structural, biochemical and functional changes.	- Interactive lectures. - PBL sessions.	-End module objective exams. - Final written objective type, short essay and OSPE. -Assessment of PBL sessions (using rubric).
2.2	Correlate the value of laboratory measures in the diagnosis of various diseases affecting the studied systems.		
2.3	Apply pharmacological aspects of the commonly used drugs related to studied systems disorders.		
3.0	Interpersonal Skills & Responsibility		
3.1	How to present a medical case	- PBL sessions. - Student's presentation. - Group poster presentation.	- Assessment of PBL activities (using rubric). - Assessment of student presentation using rubric. - Assessment of group presentation using rubric.
4.0	Communication, Information Technology, Numerical		



4.1	Use IT effectively in searching for knowledge and communication with colleagues and instructors	- PBL sessions. - Student's presentation. - Group poster presentation.	- Assessment of PBL activities using rubric. - Assessment of student presentation using rubric. - Assessment of group presentation using rubric.
5.0	Psychomotor skills		
5.1	Manipulate some basic laboratory tools in efficient and safe way.	Practical sessions.	- Assessment according to logbook. - Final OSPE exam

Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
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.



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
5.1.	Continuous evaluation:		
5.1.1	1.1 PBL assessment.	1 st -12 th weeks	5%
5.1.2	1.2 Log book.		5%
5.1.3	1.3 Student presentation		5%
5.2.	End module exams (objective type exam)		
5.2.1	Respiratory & renal modules.	4 th week	9%
5.2.2	Musculoskeletal modules.	7 th week	9%
5.2.3	Nervous system modules.	11 th week	9%
5.2.4	Endocrine system modules.	14 th week	8%
5.3.	Final examination		
5.3.1	MCQs exam.	16 th – 17 th week	15%
5.3.2	Short essay exam		20%
5.3.3	OSPE exam		15%

D. Student Academic Counseling and Support

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)

Tutor availability of 2 hrs. weekly

E. Learning Resources

1. List Required Textbooks:

- 1.1 Abul K. Abbas, Andrew H. H. L and Shiv P: Basic immunology: Functions and Disorders of the Immune System, 4th edition; 2014.
- 1.2 Goodman & Gilman's. The Pharmacological Basis of Therapeutics; 12 editions, 2011 McGraw-Hill.
- 1.3 John A. Yagiela, Frank J. Dowd, Bart Johnson; Pharmacology and Therapeutics for Dentistry; 6th edition 2011.
- 1.4 Arora BB and Arora DR: Textbook of Microbiology for Dental Students 3rd edition; 2015.
- 1.5 Clive Page; Brian Hoffman; Michael Curtis; Michael Walker; Integrated Pharmacology: 3rd edition, 2011, Mosby & Elsevier.
- 1.6 Doan T, Melvold R, Viselli S and Waltenbaugh C: Immunology (Lippincott Illustrated Reviews Series) , 2nd edition; 2013
- 1.7 Grey's anatomy 40th edition, 2013, Saunders Elsevier
- 1.8 Guyton, AC and Hall, Textbook of Medical Physiology, 12th ed., 2011. WB Saunders Co.
- 1.9 Histology A Text and Atlas with Correlated Cell and Molecular Biology; Michel H Ross and Wokciech Pawlina. 6th 2016.
- 1.10 Pamela Champe, Richard Harvey and Denise Ferrier. Lippincott's Illustrated Reviews Biochemistry 6th. edition 2014, Lippincott Williams and Wilkins.
- 1.11 Robbins Basic Pathology, By: Kumar, Abbas, Fausto, Michel. 9th edition 2016.
- 1.12 Rubin's pathology Clinicopathologic Foundation of Medicine Raphael Rubin and David S. Strayer 7th edition 2016.

2. List Essential References Materials (Journals, Reports, etc.)

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc.)

- 3.1 Lakshman Samaranayake Essential Microbiology for Dentistry 4th edition; 2011
- 3.2 Ganda, K: Dentist's Guide to Medical Conditions & Complications. 1st ed. Wiley-Blackwell, USA. 2008.
- 3.3 Devlin TM. Textbook of biochemistry with clinical correlation, 8th edition, 2010



<p>3.4 Ganong's Review of medical physiology, 23rd edition, 2010, Churchill Livingstone. 3.5 Peter Armstrong, Diagnostic imaging, 6th edition, 2010. 3.6 Richard S. Snell, Clinical Anatomy for Medical Students, 1995.</p>
<p>4. List Electronic Materials (e.g. Web Sites, Social Media, Blackboard, etc.) 4.1 Hill DR, Stickell HN, and Crow S. Brandon/Hill selected list of print books and journals for the small medical library [web document]. New York, NY: Mount Sinai Medical Center, The Gustave L. and Janet W. Levy Library, 2003. [cited 26 Sep 2007]. <http://www.mssm.edu/library/brandon-hill/small_medical/l>. 4.2 http://www.freebookcentre.net/medical_books_download/Medical-Microbiology-for-Graduate-Students.htmlNational Library of Medicine, authors. PubMed. National Library of Medicine. http://www.ncbi.nlm.nih.gov/PubMed/medline.html. 4.3 http://www.microbiologybook.org/</p>
<p>5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.</p>

F. Facilities Required

<p>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.)</p>
<p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) 1.1 Each teaching classroom in the faculty can accommodate up to 50 students at one time and 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 PBL session rooms. Each room should contain a rounded table, 10-12 chairs with net connection facilities, board, and data show equipment's. 1.3 Laboratory room. Each laboratory room can accommodate up to 50 students at one time and seats arranged in rows with spaces between them. These labs are supplied with audiovisual equipment, data show, a large screen, screen pointers & microscopes.</p>
<p>2. Computing resources (AV, data show, Smart Board, software, etc.) AV and Data show projectors.</p>
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list). Laboratories These labs are supplied with wide study benches, specimens, data show, large screens, good lighting sources, microscopes & other equipment are needed for training of the students on such skills.</p>

G Course Evaluation and Improvement Processes

<p>1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching A course evaluation questionnaire is designed to assess the effectiveness of the course regards, objectives and teaching facilities, instructor, assessment process and resources. It is distributed to all the students at the end of the course, the data is analyzed and interpreted to be discussed by the course committee in order to issue an improvement plan for any difficulties facing the students.</p>
<p>2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor Annual course report should revise by all members of course staff.</p>
<p>3. Processes for Improvement of Teaching: 3.1 Encouragement of tutor-students active lectures. 3.2 The use of different topics of presentations.</p>



- 3.3 Favoring of continuous assessment throughout the semester
3.4 Encouraging the use of scientific journals, web sites and visiting King Abdullah electronic library.
3.5 Encouraging cooperative learning with inquiry and discussion.
3.6 Topics of oral presentations and poster group presentations should be more related to dentistry with application of studied subjects.
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)
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 students' answer by 2 evaluators and one evaluator after OMR.
4.2 Evaluations of poster activity by other members of faculty staffs.
4.3 Evaluations of presentations by most or all members of basic medical sciences staffs.
- 5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.
The course is revised annually after its delivery in the light of the results of students' performance (students' grades) and the results of the course evaluation questionnaire by both students and teaching staff.
The basic medical sciences staffs discuss these issues to decide any modifications of topics, timetable and assessments strategies. They revise the course intended learning objectives and the content. Any changes in the objectives, teaching strategies or assessment methods will be documented in the course specification of the next year. Major changes could not be considered except after being approved by the curriculum committee.

Faculty or Teaching Staff:

Dr. Ali Abdel Wahab Al-Attar (Assistant Professor of General Pathology).
Dr. Fathy El-Fasakhany (Associate Professor of Biochemistry).
Dr. Ayman Al-Guindy (Professor of Internal Medicine).
Dr. Abdel-Rahman Youssef (Assistant professor of Microbiology & Immunology).
Dr. Abdel-Razik Sheta (Professor of anatomy).
Dr. Ibtesam Kamel Afifi (Professor of Medical Microbiology and Immunology).
Dr. Shahid S. Siddiqui (professor of Human Genetics).
Dr. Yahia A. Maher (Assistant professor of Microbiology).
Dr. Zakir-Allah (Associate Professor of Pharmacology).

Signature: Ali Abdel Wahab Alatar _____ **Date Report Completed: 8/1/2018**

Received by: _____ **Dean/Department Head**

Signature: _____ **Date:** _____