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Kingdom of Saudi Arabia
National Commission for
Academic Accreditation & Assessment



المملكة العربية السعودية
الهيئة الوطنية للتقويم
والاعتماد الأكاديمي

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Assessment

T6. Course Specifications
(CS)

T6._Course Specifications_1 Feb 2015



Course Specifications

Institution	Date
University of Hail	25-11-2016
College/Department Preparatory Year– Department of basics sciences (Medical Track)	

A. Course Identification and General Information

1. Course title and code: Medical Physics - PHYS121			
2. Credit hours: 3 hours			
3. Program(s) in which the course is offered. Preparatory Year– Medical Track			
4. Name of faculty member responsible for the course Dr. Khaled Mohammed Roumaih			
5. Level/year at which this course is offered: 2015/2016 – Second Semester			
6. Pre-requisites for this course (if any) Nothing			
7. Co-requisites for this course (if any) Nothing			
8. Location if not on main campus Deanship of preparaty year-Baqaa Road (male), Aga, Al-Hayet, Al- Shamili, A-Shinan, Ghazalah, Baqaa (female)– Hail			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input type="checkbox"/>	What percentage?	<input type="checkbox"/>
b. blended (traditional and online)	<input checked="" type="checkbox"/> Yes	What percentage?	<input type="checkbox"/> 80%
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="checkbox"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="checkbox"/>
f. other	<input checked="" type="checkbox"/> Yes	What percentage?	<input type="checkbox"/> 20%
Comments: The other mode of instruction is Laboratory			

B Objectives

1. What is the main purpose for this course?

As the advice of various medical schools, this course must be studied for preparatory year students. So, this course discuss the basic knowledge skills in theoretical and experimental medical physics together which help preparatory year students understand sciences relation with physics.

2. Briefly describe any plans for developing and improving the course that are being implemented. Using the Blackboard as an educational environment in delivering the home works and, lectures and others to students.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

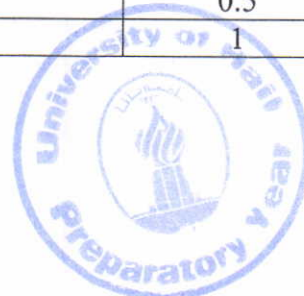
The objective of this course is learning of biological physics for the first year undergraduate students in the health sciences with little background in mathematics and physics.

General Objectives:

- *Knew the fundamental units and basic principles of medical physics.*
- *Be aware of some apparatus and techniques used in medical physics*
- *Be capable of understanding main facts and generalizations of familiar phenomena in the human body.*
- *Be able to understand and interpret information presented in tables, graphs and mathematical equations.*
- *Be able to analysis the results at practical work in the form of complete, understandable and objective reports.*

1. Topics to be Covered

List of Topics	No. of Weeks	Contact Hours
Mechanics of the body	1.5	3
Pressure and blood flow	3	6
Nerve conduction	2	4
Revision for Mid Exam	1	2
Sound in medicine	2	4
Optics in medicine	2	4
Radiation in medicine	2	4
Solving Problems	0.5	1
Revision Final Exam	1	2



2. Lab						
Topics Covered	Planned Contact Hours	Actual Contact Hours	Reason for Variations if there is a difference of more than 25% of the hours planned			
Introduction	4	4	-			
Fitting a Line to X-Y Data: Least Squares Method	2	2	-			
Human Forearm in Static Equilibrium	2	2	-			
Determination of Surface Tension of water	4	4	-			
Determination of Viscosity Coefficient of Glycerin by Stock's law	2	2	-			
Velocity of Sound in Air	2	2	-			
Cathode Ray Oscilloscope (CRO)	2	2	-			
Verification of Ohm's law	4	4	-			
Speed of an electric pulse in a nerve by CRO	2	2	-			
Determination of the Power of convex Lens and concave Lens	2	2	-			
Revision	4	4	-			
2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory or Studio	Practical	Other:	Total
Contact Hours	30	-	-	30	-	60
Credit	2	-	-	1	-	3

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

N/A

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

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

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Explain How the human body works.	Lectures.	Home works, Quizzes