جامعة المجمعة
Majmaah University

رؤية VISION 2030
المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

COURSE SPECIFICATIONS
(CS)

Ramadan 1438 H , June 2017

Institution:	…….. Majmaah University .
Academic Department :	……...Basic Science Department.
Programme :	…… PYP Programme.
Course title and code:	Physics For Medical Purposes / PPHS125.
Specification Approved Date :	22/12 / 1439 H

Course Specifications

Institution: **Preparatory Year Deanship**	**Date:** 22/ 12 / 1439 H
College/Department :Basic Science / PYP	

A. Course Identification and General Information

1. Course title and code:...Physics For Medical Purposes / PPHS125

2. Credit hours: 2 hours

3. Program(s) in which the course is offered. Medicine, Medical Science and Dentistry
(If general elective available in many programs indicate this rather than list programs)

4. Name of faculty member responsible for the course OMAR HANI ALMEQBEL

5. Level/year at which this course is offered: 2nd level, second semester. (Preparatory Year)

6. Pre-requisites for this course (if any): **NONE**

7. Co-requisites for this course (if any): **NONE**

8. Location if not on main campus: **:** Preparatory Year Buildings/Majmaah and Zulfi.

9. Mode of Instruction (mark all that apply):

a. traditional classroom	√	What percentage?	66.6%
b. blended (traditional and online)		What percentage?	
c. e-learning		What percentage?	
d. correspondence		What percentage?	
f. other	√	What percentage?	33.3%

Comments:

B Objectives

1. What is the main purpose for this course?
   The main purpose of this course is to provide the student with the fundamentals and basic physical concepts which are directly related to engineering

- 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).
- Plans that are being implemented for developing and improving the course:
  - Continuous updating of the information, knowledge and skills included in the course through continuous search for new knowledge and skills available in recent publications (references, books, researches, magazines, internet….).
  - Verifying the information resources.
  - Continuous evaluation of the course content, student level, and develop plans accordingly

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

Course Description:
Basic Physics For Medical

1. Topics to be Covered		
List of Topics	**No. of Weeks**	**Contact hours**
Unit 1: Introduction to physics , Units and Measurements	**3**	**9**
Unit 2: Mechanics	**3**	**9**
Unit 3: Heat and Properties of Matter	**3**	**9**
Unit 4: Light and Optics	**3**	**9**
Unit 5: Modern Physics	**3**	**9**

2. Course components (total contact hours and credits per semester):

		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planed	30			15		45
	Actual	=			=		
Credit	Planed	15			15		30
	Actual	=			=		

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

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.

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. (Courses are not required to include learning outcomes from each domain.

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	**Knowledge**		
1.1	Recognize the importance of physics in daily life.	Group discussion, lecture, team work learning, and handouts.	Continuous feedback, oral, Quizzes, and written exams
1.2	Recognize the importance of the role of physics in Science and Technology.	Group discussion, lecture, team work learning, and handouts.	Continuous feedback, oral, Quizzes, and written exams
1.3	Develop skills for understanding and interpreting of physical phenomena.	Group discussion, lecture, team work learning, and handouts.	Continuous feedback, oral, Quizzes, and written exams
1.4	Develop working skills for solving different physics problems	Group discussion, lecture, team work learning, and handouts.	Continuous feedback, oral, Quizzes, and written exams

2.0	**Cognitive Skills**		
2.1	• Use the physics laboratory to apply what they learn	Group discussion, lecture, team work learning, and assignments	quizzes , participation , written exams
2.2			
3.0	**Interpersonal Skills & Responsibility**		
3.1	Develop certain team work activities.	Assignments and team work activities	Observing students, assignment.
3.2			
4.0	**Communication, Information Technology, Numerical**		
4.1	Use internet for searching certain electronic journals regarding topics of the course.	Research activities, assignments	Assignments, participation.
4.2	Prepare and present certain topics during the semester, look out for certain issues in the course	Research activities, assignments	Assignments, participation.
5.0	**Psychomotor**		
5.1	Not applicable	Not applicable	Not applicable
5.2			

5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (i.e., essay, test, quizzes, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Midterm exam 1	**7**	**20**
2	Midterm exam 2	**12**	**20**
3	Quizzes and homework	During the term	**10**
4	Lab exam	15th week	**10**
5	Final Assessment exam	17th week	**40**
6			
7			
8			

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)

4 hours are schedule as office hour per week

E Learning Resources

1. List Required Textbooks

DALE EWEN,NEILL SCHURTER, P. ERIK GUNDERSEN, Paul G. Hewitt **INTRODUCTION TO PHYSICS**, Copyright 2016, ISBN: 978-1-78449-328-8

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

www.academicpub.org/jbap/

3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- APPLIED PHYSICS , TENTH EDITION . DALE EWEN,NEILL SCHURTER, P. ERIK GUNDERSEN , ISBN : 978-0-13-611633-2
- Conceptial Physics ,Eleventh Edition , Paul G. Hewitt **, ISBN 978-0-321-68492-9**

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

http://science.pppst.com/physics.html

http://physwiki.ucdavis.edu
http://www.physics.org

F. Facilities Required

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.)

- Classrooms with LCD projectors and 20 seats

2. Technology resources (AV, data show, Smart Board, software, etc.)

- The classroom must be equipped with smart or active board

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

- laboratory equipment physics (x-ray detector)

G Course Evaluation and Improvement Processes

1. Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Course Evaluation Questionnaire at the end of the term
- Daily log for students comments and observations

2. Other Strategies for Evaluation of Teaching by the Instructor or by the Department

- Peer Review evaluation of course' content, format, and teaching strategies
- External reviewers of the course annually

3. Processes for Improvement of Teaching

- Keeping up-to-date with new international trends and innovations in teaching strategies
- Conducting research to evaluate best methods of teaching
- Seeking external assessment of teaching strategies (supervised by head of department and College Dean)
- Attending relevant workshops and seminars
- Review of course components (contents teaching strategies and format) by internal and external reviewers at least annually
- Invitation of external guests speakers in the field for feedback
- Collaboration with sister universities in curriculum development

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)

- Marking and scoring checking by an independent faculty member of a sample of student work
- Periodic exchange and remarking of a sample of assignments with a faculty member in same institution
- Periodic exchange and remarking of a sample of assignments with a faculty member in another institution
- Discussing course objectives, teaching strategies, exams, students learning abilities and achievements, with another colleague in the same field

5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Statistical process for student result
- Then annual review and assessment of the course both internally and externally
- All done with consideration to feedback from students and other faculty members

Name of Course Instructor: OMAR ALMEQBEL
Signature: ……. Date Specification Completed: 22/ 12/ 1439 H
Program Coordinator: … OMAR ALMEQBEL **…….**

Signature: …….. Date Received: .....22/ 12 / 1439 H