



Course Specifications

Muharram 1437 H

Institution:	Majmaah University
Academic Department :	Basic Science Department
Programme :	PYP Programme
Course :	PHYSICS FOR MEDICAL PURPOSES
Course Coordinator :	OMAR ALMEQBEL
Programme Coordinator :	PYP Programme
Course Specification Approved Date :	28./ 1 / 1438H



A. Course Identification and General Information

1 - Course title :	PHYSICS FOR MEDICAL PURPOSES	Course Code:	PPHS125...
2. Credit hours :	2		
3 - Program(s) in which the course is offered:	Medicine, Medical Science and Dentistry		
4 – Course Language :	. ENGLISH....		
5 - Name of faculty member responsible for the course:	...OMAR ALMEQBEL..		
6 - Level/year at which this course is offered :	2 nd level, second semester. (Preparatory Year)		
7 - Pre-requisites for this course (if any) :	•NONE.....		
8 - Co-requisites for this course (if any) :	•NONE.....		
9 - Location if not on main campus :	: Preparatory Year Buildings/Majmaah and Zulfi.		
10 - Mode of Instruction (mark all that apply)			
A - Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	...66.6. %
B - Blended (traditional and online)	<input type="checkbox"/>	What percentage? %
D - e-learning	<input type="checkbox"/>	What percentage? %
E - Correspondence	<input type="checkbox"/>	What percentage? %
F - Other	<input checked="" type="checkbox"/>	What percentage?	...33.3 %
Comments :	.....other is lab.....		

B Objectives

<p>What is the main purpose for this course?</p> <p>The main purpose of this course is to provide the student with the fundamentals and basic physical concepts which are directly related to engineering..</p>
<p>Briefly describe any plans for developing and improving the course that are being implemented :</p> <ul style="list-style-type: none"> • . Plans that are being implemented for developing and improving the course: <ul style="list-style-type: none"> ○ 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

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	Practical	Other:	Total
Contact Hours	.. 30...	.....	.....	..15.	.....	..45.....
Credit	.....15...	.....	.....	.. 15.....	.....	..30.

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

..4.....





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

	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
١, ٣	Develop skills for understanding and interpreting of physical phenomena.	Group discussion, lecture, team work learning, and handouts.	Continuous feedback, oral, Quizzes, and written exams
١, ٤	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
3.0	Interpersonal Skills & Responsibility		
3.1	Develop certain team work activities.	Assignments and team work activities	Observing students, assignment.
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. Schedule of Assessment Tasks for Students During the Semester:

	Assessment task	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	16 th week	10%
5	Final Assessment exam	17 th week	40%





D. Student Academic Counseling and Support

- 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 :

www.academicpub.org/jbap/

3. List Recommended Textbooks and Reference Material :

APPLIED PHYSICS , TENTH EDITION . DALE EWEN, NEILL SCHURTER, P. ERIK GUNDERSEN , ISBN : 978-0-13-611633-2

- **Conceptual Physics , Eleventh Edition , Paul G. Hewitt , ISBN 978-0-321-68492-9**

-

4. List Electronic Materials :

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

<http://physwiki.ucdavis.edu>

<http://www.physics.org>

5. Other learning material :

-

F. Facilities Required

1. Accommodation

- Classrooms with LCD projectors and 20 seats

2. Computing resources

- The classroom must be equipped with smart or active board

3. Other resources

- 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 Program/Department Instructor :

- 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

- 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
-

Course Specification Approved

Department Official Meeting No (.....) Date 28 / 1 / 1438 H

Course's Coordinator

Name : OMAR ALMEQBEL

Signature :

Date : 28./ 1 / 1438... H

Department Head

Name : MAHER
OBEIDAT

Signature :

Date : 28./ 1 / 1438 H



