جامعة المجمعة
Majmaah University

نموذج توصيف مقرر دراسي

Course specification

Institution:	Majmaah University- College of Education
Academic Department :	Biology Department
Programme :	B.A
Course :	General Physics I
Course Coordinator :	Dr. Maysoon Mokel
Programme Coordinator :	Dr. Mona Makya
Course Specification Approved Date :	12/ 4 / 1437 H

A. Course Identification and General Information

1 - Course title : General Physics I	Course Code: Phys111
2. Credit hours : (2)	
3 - Program(s) in which the course is offered: B.A in Biology	
4 – Course Language : Arabic	
5 - Name of faculty member responsible for the course: Dr.Mayson Asad	
6 - Level/year at which this course is offered : Level1	
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: .not applicable	

10 - Mode of Instruction (mark all that apply)

A - Traditional classroom	√	What percentage?	97 %
B - Blended (traditional and online)	√	What percentage?	3 %
D - e-learning	×	What percentage?	---------
E - Correspondence		What percentage?	……. %
F - Other		What percentage?	……. %

Comments :

……

B Objectives

1- What is the main purpose for this course?

The course aims to introduce students to:

2- provide the student with laws and rules physical that govern the natural external world and given fundamentals and basic concepts relating to the science of physics, which help her in her studies and her work in the future .

2- Briefly describe any plans for developing and improving the course that are being implemented :

1- The application of e-learning system D2L .

C. Course Description

1. Topics to be covered (Theoretical+ Practical)

List of Topics	No. of Weeks	Contact Hours
1.Rectilinear Motion Dynamics (Newton's Laws of Motion) 2. General Guidelines for Laboratory Conduct 3. Charts and Calculator Usage	2	7
4. Work and Energy 5. Calipers Experiment 6. Micrometer Experiment 7. Spherometer Experiment	3	9
Midterm Exam1+Feedback	1	2
9- Elasticity and Simple Harmonic Motion 10. Simple Pendulum Applications 11. Simple Pendulum Experiment 12. Hooke's Law and Spring Constant Calculation	3	9
Midterm Exam2+Feedback	1	2
14- Wave Motion 15. Wave Motion Applications 16. Spring Constant Calculation from the Wave Motion of the Mass	4	12
17- Sound Waves 18. Speed of Sound Measurement 19. Revision 20. Practical Examination	1	3

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

	Credit	Contact Hours			Self-Study	Other	Total
		Lecture	Laboratory	Practical			
NCAAA	2 ch	14	30	-	-	-	44
ECTS	2.8 cp	14	30	-	25	14	83

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

1.3 hrs.

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
	Knowledge		
1.1.1	Define the most basic concepts in classical physics	Lectures	Assignments
1.2.1	Give a correct scientific description of object motion and wave motion	Warming up discussion	Exams, quizzes,
	Cognitive Skills		
2.1.1	Differentiate between terms in classical physics	Brainstorming,	Exams
2.2.1	Verify the validity of the theories related to the subject matter by a correct logical mathematical induction	Discussion	Self-learning
	Interpersonal Skills & Responsibility		
3.4.1	- to take the responsibility of her self-study and to communicate effectively among a group.	Cooperative learning	Observations, exams
	Communication, Information Technology, Numerical Skills		
4.2.1.	Master the use of internet in collecting helpful information to explain natural phenomena	Self-learning	Assignments
	Psychomotor		
5.1.1	Name the laboratorial tools and devices correctly and use them gently and carefully to keep them in a good condition.	Lab strategy	Assignments.
5.2.1	Draw the curve that represents the experimental results accurately and use it to compare the practical results to the theories correctly.	.....	.....

5. Schedule of Assessment Tasks for Students During the Semester:

	Assessment task	Week Due	Proportion of Total Assessment
1	**Midterm Exam-1** **Midterm Exam-2**	**Week 6** **Week 11**	**20%**

2	**Participation/attendance**	**weekly**	**10%**
3	**Final Practical exam**	**Week 16th**	**20%**
4	**Final exam**	**17-19th week**	**50%**

D. Student Academic Counseling and Support

e-mail :- m.makl@mu.edu.sa (to connect with students)

implicate D2L E-Learning system

Website of the department in main page of university http://faclty.mu.edu.sa/mmakl

Office hours :- 4 hour per course per week –which are specified in announcement board and on the home page of the website

E. Learning Resources

1.List Required Textbooks :

1- Theoritical part :-
Dr. KHader Moamed Abdulrahman Ahshybany- dr .Osama Ahmed Alaky –General Physivcs for universities ((Mechanics - mechanical properties of the material - heat) Khuraiji House for Publishing and Distribution, Riyadh, 1424

2- Practical part: d. Marwan Ahmad Fahad, Abdul Aziz Ali Masoud, Fundamental experimental physics: Obeikan Library, Riyadh

2. List Essential References Materials :

1. Prof. Abdul Aziz Hamid Issawi, d. Walid Tawfiq Mohammed Younis, General Physics for the first-year university (Part I): Rushd Library Publishers, Riyadh, First Edition 1428 2007 - m
1. Dr.Alsamany Shokr allah, General Physics: Rushd Library Publishers, Riyadh, the first edition 0.2008
2. dr. Ibrahim Abdul Rahman Al-Aqeel, d. Ahmed Ahmed Salim Musmus. Dr.. Ahmed Fouad Mahmoud Meera and others, Experimental Physics (undergraduate years): Dar Khuraiji for Publishing and Distribution, Riyadh

3. List Recommended Textbooks and Reference Material :

1. dr. Mohamed Robin Idris, Mohamed Attia Sweilem, Badi Saleh al-Khatib, dr. Ahmed Yousef Kawasmeh, General Physics: Dar Alfekr, Amman, Jordan, Fifth Edition 1427, 2006
2. dr. Marwan Ahmad Fahad, the basic physics theory: Obeikan Library, Riyadh
3. dr. Rafat Kamel, the basics of classical and contemporary physics: Daralamaref,

Cairo, Sixth Edition, 1987
4. List Electronic Materials : **1- Forum of Arab physicists** www.phys4arab.net/vb/ **2- Physical encyclopedia** ar.wikipedia.org/wiki/%25D9%2585%25D 3- Forum physical experiments www.phys4arab.net/vb/forumdisplay.php... 4- Educational web site for physics www.hazemsakeek.com 5- British Physical Journal www.physicsworld.com
5. Other learning material :

F. Facilities Required

1. Accommodation **- classroom (5*7)meter - 35 chairs** **- lab (6*8)meter - 25 chairs**
2. Computing resources
3.Otherresources Laboratory equipments related to the course:- (Akaddmh with Vernier, Alasveromitr, micrometers, a hook, a simple pendulum, different sizes of sheet metal, with different diameters with different forms of solids, metal (..... balls, springs

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching: 1- ask questions during the lecture, multiple tests during the semester, ask questions on the website (assignments), discuss the subject, and distribution questionnaires to the students at the end of the semester for course assessment . 2- questionnaire of course evaluation . 3- questionnaire about students' satisfaction about teaching, learning and evaluation methods . 4- a session with strongest and weakness students
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor : **5.** Course Evaluation Form 6. Annual sufficiently reports prepared by the management of the department
3 Processes for Improvement of Teaching : 1- The application of modern technologies in the learning .

2- E-learning application .

3- workshops on teaching and learning methods .

4- programs and training courses to improve teaching and learning skills -١

4. Processes for Verifying Standards of Student Achievement

- Check marking of a sample of examination papers either by a resident or visiting faculty Member
- External evaluator

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

1- Periodical meetings with the department members whose teach physics to . find out the weaknesses and strengths points to processes and promotion it .
2- continuous access to special sites of the course to get any new in this science.
3- Taking the students' views about how to provide lectures, the test questions and discuss it objectively.
4- Taking the students' views about the course questionnaires that were distributed to them, at the end of the semester, which reflect students' views about course topics and teaching method
5- course evaluation
6- Review Study Plans
7- develop the study plan for the course in the light of contemporary trends and the .needs of society .

Head of the academic department
Dr . Mona Makya
Signature
Date

Course coordinator
Dr. Mayson Asad Makl
Signature
Date12/4/1437

The Course specification adapted in Department session (n.6.) Dated 12/4/1437 H

Institution:	Almajmmah university
Academic Department :	College of Education
Programme :	Biology
Course :	general chemistry
Course Coordinator :	Ahlam mobty Almoteiry
Programme Coordinator :	Dr. Mona Makiya

Course Specification Approved Date : 1/4 / 1437 H

A. Course Identification and General Information

1 - Course title : General chemistry .	Course Code: CHEM111
2. Credit hours : 3(2 theoretical +1practical)	
3 - Program(s) in which the course is offered: CHEMISTRY	
4 – Course Language : Arabic	
5 - Name of faculty member responsible for the course:	Ahlam almoteiry.
6 - Level/year at which this course is offered : one	
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 : Not applicable)	

10 - Mode of Instruction (mark all that apply)

A - Traditional classroom	√	What percentage?	% 50
B - Blended (traditional and online)	√	What percentage?	% 10
D - e-learning	√	What percentage?	% 10
E - Correspondence		What percentage?	% .....
F - Other	√	What percentage?	% 30

Comments :

It needs to be teaching lab

B Objectives

What is the main purpose for this course?

That student taught the basics of physical chemistry concepts and inorganic various sports , laws and relations that control the various chemical phenomena.

Briefly describe any plans for developing and improving the course that are being implemented :

- Approval of interactive teaching method by smart blackboard and PowerPoint presentations.
- Approval of interactive assessment method via academic page for Professors.

- Approval of the method seminars and interactive education with students.
- Approval of self-learning to search for some vocabulary in information sources and sites of scientific research related to the content of the textbook.
- Updated vocabulary regularly.

Sharing experiences with more experienced colleagues.

Course Description

1. Topics to be Covered (Theoretical+ Practical)

List of Topics	No. of Weeks	Contact Hours
1. Status of the study : o Introduction on the status of art. o Study some of the terms such as pinnacles - weight molecular weight - the mall o The most important units used A. gaseous state : o General properties of gases o Boyle's law (pressure - Code Size) o Charles's Law (Law Size - temperature) o expressed mathematically law o Law Ofujadro- letter of the law o expressed mathematically law expression of Boyle's law mathematically o disclosure of negative ions in the group hydrochloric acid salts	1	4
General equation of gases and precursors Hard year for gases R and its units Applications on the general equation	1	3
Diffraction gases Alhakiqih- Diffraction caused by the negligence of the size of the particles Diffraction caused by the attractive forces between molecules neglect Vanderfal equation and the real explanation for the diffraction of gases from ideal gas laws B - liquid state The liquefaction of gases About the liquid state and the difference between them and the gaseous state And the forces of attraction between the types of molecules Evaporation and types of heat evaporation The vapor pressure of the liquid Surface tension The effect of temperature on the vapor pressure	1	3

Detection of negative ions in the sulfuric acid salts group		
Atom components o to study the important terms such as Atom o atomic number - number mass - isotopes and examples o electromagnetic radiation o recipes rays , a wave - length of frequency - Speed o Material and energy o emission spectrum Detection of negative ions in the Group salts Study the structure of the atom o scientific basis Atomic Theory	1	3
Thomson's theory of the atom o Rzrford theory of the atom oBohr theory of the hydrogen atom Review (negative ion detection anonymous) Quantum preparation Forms orbits The distribution of the electrons and the possibility of its presence in orbit Work in practical exam	1	3
Mid-term Exam 1	1	2
C - solid state o About the solid state and the difference between them and the gaseous state and liquid state o characteristics of solid material such as freezing Anshar- ….. etc. o vapor pressure of solid material o types of crystalline solids Pauli exclusion principle to Hond base and applications by Electronic arrangement of the elements Basal cracks detected in the first set of metal ions	1	3
Thermochemistry o Study of thermodynamics terms (System - the surrounding medium) o types of systems (Open - Closed - isolated) o types of operations in thermodynamics and including: o Alaizotromeh process o The first law of thermodynamics o heat capacity at constant volume and pressure	2	6

o Hess's Law o adverse interactions and adverse reactions o rule or principle of Ocatilah text- mass action law o formula each of Kp, Kc and the relationship between them. Detection of the basal notches in the second set of metal ions Detection of cracks in the basal third group of metal ions		
Mid-term Exam 2	1	2
Chemical equilibrium Periodic Table of the Elements Trios Dobrinr Octets Newlands Table since the fiber to categorize items Modern periodic table (groups) Advantages and disadvantages of the periodic table The results of the periodic table of the elements Detection of cracks in the basal fourth set of metal ions Detection of the basal cracks in the fifth set of metal ions	2	6
Equilibrium Ionian o acids and bases (Arrhenius definition - Bronsteid and Lori and Lewis acids and bases) o factors that determine the strength of the acid o ionic links and examples and the properties of their compounds o covalent linkages and examples and the properties of their compounds o detect basal cracks in Group D of metal ions Detection of the basal cracks in Group F of the metal ions Review (detection incision baseline anonymous)	2	6
o common ion effect o Organization lotions and mechanically work the solution regulator. The separation of ions precipitation Chemical supplement rules, namely: o links and examples of harmonizing them and the properties of their compounds o metal links and examples and the properties of their compounds o Natural links oGeneral Review	1	3

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

	Credit	Contac Hours			Self-Study	Other	Total
		Lecture	Laboratory	Practical			
NCAAA	2 ch	14	30	-	-	-	44
ECTS	2.8 cp	14	30	-	25	13	82

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

2 hrs.

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**		
1.1.1	Describes the thermodynamics terms	Academic lectures	Homework and written tests
1.2.1	Special article reviews some gas - liquid - solid mathematical laws their own terms.	Academic lectures	Homework and written tests
2.0	**Cognitive Skills**		
2.1.1	Devise special cases of material laws and thermal chemistry	Research paper	Editorial and laboratory tests
2.2.1	Formulate the properties of elements on the periodic table based electronic installed	Academic lectures	Homework and written tests
3.0	**Interpersonal Skills & Responsibility**		
3.3.1	Bear the responsibility of self-learning in the completion of tasks and duties	Reciprocal Teaching Debate Strategic dialogue	Note Presentations
4.0	**Communication, Information Technology, Numerical**		
4.1.1	Choose different and distinct models to view the topics related to decision	Teaching mini e-learning Self-education	Research papers Presentations Written tests
4.2.1	Communicate effectively within the working groups		
5.0	**Psychomotor**		
5.1.1	deals with the tools and raw materials and laboratory devices according to the safety and security laws in the lab	Lab strategy Cooperative learning	Practical tests Note Reports

5. Schedule of Assessment Tasks for Students During the Semester:

	Assessment task	Week Due	Proportion of Total Assessment
1	Mid-term test (1) a theoretical Mid-term test (2) Theoretical	The sixth week The tenth week	10% 10%
2	Post Research Theoretical and practical	Ten atheist week	5%

3	E-Learning	During the semester	5%
4	The final test (practical)	16th week	20%
5	The final test (theoretical)	17-19th week	50%

D. Student Academic Counseling and Support

Email a.almoteiry@mu.edu.sa
Office hours + social media + e-learning system

E. Learning Resources

1. List Required Textbooks :

General Chemistry d . Ahmed Abdul Aziz Ays- Dr. Sulaiman Al Alkhuytr- Dr. Abdul -Aziz Wasil Khraiji House for Publishing and Distribution

2. List Essential References Materials :

The basis of physical chemistry Prof. Mohamed Magdy dawn and continued for publication
o basis in physical chemistry Prof. Dr. Suleiman Abdul Alim Fatima Hafiz full

3. List Recommended Textbooks and Reference Material :

Summary General Chemistry Prof. Abdullah Asiri - d . Judge Mohammed Hafez Dar Released in 2008 for publication and distribution of Jeddah - Saudi Arabia

4. List Electronic Materials :

Many sites belonging to the physical and inorganic chemistry

5. Other learning material :

Action forum for students on the e-learning system for the discussions and put forward threads curriculum

F. Facilities Required

1. Accommodation

chemistry lab accommodates approximately 24 student band divided into groups
o Classrooms
o The number of seats enough for all students

2. Computing resources

Computer lecturer

3. Other resources

Electronic blackboard and what required such as projector and etc .....
o - laboratory equipment such as laboratory equipment from water baths No.ah- delicate balance Kahrbaiah- distillation device Alme- Glassware ..... etc.

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching:

- Give a questionnaire to the students to evaluate the Textbook at the end of the semester
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2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor :

- Evaluation of the colleagues in the department to perform of a faculty member in the assessment of the textbook and the effectiveness of the tools that used to presenting.
- Internal periodic review to the textbook.
- Self-evaluation of the program.
- Annual performance report prepared by the head of the department.

3 Processes for Improvement of Teaching :

- Apply of e-learning
- Apply of new technologies
- Information technology in teaching
- Taking the recommendations of the review outcome to the textbook.
- Taking the recommendations of the relevant committee of quality unit about the textbook.
- under the guidance of department head about the performance of a faculty member based on direct observations

4. Processes for Verifying Standards of Student Achievement

- Review all the papers that have been corrected by the professor / department head / special committee according to what was decided by department management when needed at the end of each semester

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

- Hold regular meetings for faculty members to the scientific material
- The scientific material compared with similar scientific materials in a similar section
- Update of learning resources for scientific material to keep abreast of developments in the same field
- The results of the statistical report with evaluating the scientific material

Course Specification Approved
Department Official Meeting No (6) Date / / 1437 *H*

Course's Coordinator		Department Head	
Name :	Ahlam Almoteiry	***Name :***	D. Mona Makiya
Signature :	.....	***Signature :***	.....
Date :	12/4 / 1437 *H*	***Date :***	/ / 1437 *H*