هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission
اعتماد
NCAAA
2024
TP-153

Course Specification
(Bachelor)

Course Title:	**Final Year project**
Course Code:	**PHY 1498**
Program:	**Bachelor of Science in Physics.**
Department:	**Physics**
College:	**Science**
Institution:	**Imam Mohammad Ibn Saud Islamic University**
Version:	4
Last Revision Date:	***26/09/2024***

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A. General information about the course:

1. Course Identification

1. Credit hours: (4)					
2. Course type					
A.	☐University	☐ College	☒ Department	☐Track	☐Others
B.	☒ Required		☐ Elective		
3. Level/year at which this course is offered: (Level8/Year4)					
4. Course General Description:					
To demonstrate a student's work ethic, level of initiative, determination and approach to problem solving, give an early indication of a physicist's project management skills, as each student is largely responsible for their own program of work, test of general physics ability and plan and carry out a detailed and original piece of scientific research and communicate the results.					
5. Pre-requirements for this course (if any)**:**					
Solid State Physics, PHY 1436					
6. Co-requisites for this course (if any)**:**					
7. Course Main Objective(s):					
Organization of research including logistics, recording, archiving, numerical analysis and presentation of data, interpretation and presentation of results in the form of a dissertation, develop important skills in summarizing a research area.					

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	60	100%

No	Mode of Instruction	Contact Hours	Percentage
2	E-learning		
3	Hybrid • Traditional classroom • E-learning		
4	Distance learning		

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	**60**
2.	**Laboratory/Studio**	
3.	**Field**	
4.	**Tutorial**	
5.	**Others (specify)**	
Total		44

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	**Outline and learn to handle a scientific project.**	**K1, K2**	• Lectures. • Office hours.	▪ Participation. ▪ Discussions.
1.2	**Describe and state good project management skills.**	**K1, K2**	• Lectures. • Office hours.	▪ Participation. ▪ Discussions.
1.3	**Define and carry out a detailed and original piece of scientific research and communicate the results.**	**K1, K2**	• Lectures. • Office hours.	▪ Participation. ▪ Discussions.
2.0	**Skills**			
2.1	**Develop the students' ability to distinguish between different physical phenomena related to project.**	**S1, S2**	• Practical work. project.	Reports.
2.2	**Show ability to deal with various sources of**	**S2, S3**	• Discussion. • Tasks and missions.	▪ Discussions. ▪ Assignments.

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
	knowledge and the ability to exploit and to estimate the time.			
2.3	**Communicate in a clear and concise manner orally, and using IT for acquiring and analyzing information.**	**S4, S5**	• Discussion. • Mini projects provide opportunity to students to work in groups and to use the library. • Tasks and missions.	▪ Reports. ▪ Presentations. ▪ Assignments.
2.4	**Outline and develop the logical thinking related to the problems.**	**S2**	• Interactive discussions (special assignments in some courses will require students to search for data and/or information on their own). • Projects.	▪ Reports. ▪ Presentation.
3.0	**Values, autonomy, and responsibility.**			
3.1	**Show the collaboration and inter-professionalism in class discussions or team works, as well as solve problems independently.**	**V1, V2, V3**	• Small team tasks • Open discussion. Office hours.	▪ Participation. ▪ Discussion. Mini-project(s).
3.2	**Respect intellectual property rights and scientific integrity, and take responsibility for professional development.**	**V2, V3**	• Small team tasks • Open discussion. • Office hours.	▪ Reports. ▪ Presentations ▪ Assignments.

C. Course Content

No	List of Topics	Contact Hours
	Bibliography	6
	Experimental measurements and/or theoretical work.	40
	Writing of the final report	12

Total	60

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	The final year project is compulsory and 100% based on continuous assessment, i.e. it must be passed at the end semester examinations.	weekly	The final year project is an assessment of performance away from a formal examination
2.	1st Report written by supervisor on the advancement of the student's project	4th week	25 %
3.	2nd Report written by supervisor on the advancement of the student's project	10th week	25 %
4.	Written report Evaluation by supervisor	15th week	20 %
5.	Final evaluation of Oral/ Written report by examination committee	16th week	30 %

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	
Supportive References	
Electronic Materials	
Other Learning Materials	

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	- Classrooms. - Labs.
Technology equipment (projector, smart board, software)	- Classroom equipped with a whiteboard and a projector.
Other equipment (depending on the nature of the specialty)	

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	- Student.	- Indirect (The students complete the evaluation forms at the end of term. Final exam is evaluated by the second examiner)
Effectiveness of Students assessment	- Supervisor - Evaluators	- Direct (exams, HW, project, ...)
Quality of learning resources	- Faculty - Students	- indirect (surveys)
The extent to which CLOs have been achieved	- Advisor - Evaluators - Program Leaders	- Direct (excel sheet)
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewers, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	Quality Unit-Physics Department
REFERENCE NO.	Department council No. 06
DATE	26/09/2024