



Objectives vs ILO's matrix with Module courses Handbook of

B.Ed. in Physics Program

Physics Department

College of Education in Zulfi

Majmaah University

Kingdom of Saudi Arabia





1- General Objectives of the Bachelor's in Education in Physics Program.

The Educational Bachelor Program in Physics:

- Rehabilitation of the student-depth knowledge of the extent of scientific maturity, he can
 participate effectively in the scientific and technical aspects of the development and planning
 programs.
- Prepare qualified cadres scientifically to meet the needs of the labor market public and private sectors.

 In accordance with the quality standards.
- Prepare students appropriate preparation paid to continue his studies at the graduate programs at various universities in the KSA and abroad.
- The development of students' skills and developed to address the problems in a scientific manner based on the principles of the survey and analysis and conclusion substantive solutions to the raised problems.
- Work effectively individual and within a team.

There is a greet Consistency between, Physics Program Mission and general objectives of the program.

2. Specialist Goals and Objectives of Physics Program:

1) Goals

 Providing students with the concepts and fundamental principles and theories in various fields of basic Education.





Providing students the skills and the use of information technology and numerical skills and quantitative ability and efficiency in Oral and written communication in various fields of basic Education.

2) Objectives:

- 1. Provides an opportunity for a female student to deepen her knowledge in the branches of physics so that she can views on the outskirts of modern scientific research.
- 2. Compete in Labor Market, or secure acceptance in Postgraduate studies in Physics.
- 3. Explain Physics ideas with a professional and ethical responsibility.
- 4. Transmit Physics ideas both orally and in writing.

3. Intended Learning outcomes of the program

Learning outcomes for B.Ed. Program in physics are define and published in the study guide and it is available on the MU web site.

Associate and assistant professors of the B. Ed. Program in physics and course teachers have participated in the development of the intended learning outcomes.

The requirements of the labor market are transmitted into the development the intended learning outcomes of the degree program. In addition, the requirements of the post-graduate studies have been taken into account in the definition of the learning outcomes.

The Students intended learning outcomes of the B.Ed. Program in physics are defined as follows in Table 1-1.





All students in the Educational Bachelor Degree Program in Physics have the same subject.

Table 1.1: Program Intended Learning Outcomes

Do	main	Code	Intented learning Outcomes (NCAAA)
by s	uccessful completion of this	program, s	tudents would be able to:
		a1	Recognize the basics, principles, and theories of physics, in the different branches.
A	Knowledge	a2	Name the basic concepts of Education in Education, and the Arabic language, and Islamic studies.
		a3	<u>Define</u> the basic concepts in physics, Education assistance, such as mathematics, chemistry, and computer.
		b 1	Use the principles and theories of mathematics in solving physics problems of different branches.
В	Cognitive Skills	b2	<u>Use</u> of various hardware components of the physical laboratory to conduct physical experiments.
		b3	Apply the knowledge gained and the use of modern teaching strategies in explaining the physical systems.
		c1	Take into account the ethical and professional principles in the discussion of issues related to the teaching profession.
С	Interpersonal Skills and Responsibility	c2	Apply the professional and ethical principles to the teaching profession.
		с3	<u>Develop</u> the cooperative learning through discussions and collaborative work in the classroom.
_	Communication	d1	<u>Use</u> computer programs in physical systems applications.
D	and Numerical Skills	d2	Take responsibility for self-learning and lead the team.

Program Objectives	Intended Learning Outcomes	courses (Code-number)
Providing students with the	a1. Recognize the basics, principles, and	PHYS 123- PHYS 124- PHYS126-PHYS 121-
·	• • •	PHYS 122- PHYS 213- PHYS 214- PHYS212-
principles and theories in various fields of basic	branches.	PHYS215- PHYS 221 PHYS223- PHYS223-
Education.	a2. <u>Name</u> the basic concepts of Education	PHYS224- PHYS 313- PHYS 314- PHYS 312
	in Education, and the Arabic language,	PHYS322 PHYS 323- PHYS 321- PHYS 324-
	and Islamic studies.	PHYS 411- PHYS 415- PHYS 424- PHYS421-
	a3. <u>Define</u> the basic concepts in physics,	PHYS423-SALM101- SALM102- SALM103-
	Education assistance, such as	SALM104-CHEM111-MATH111.
	mathematics, chemistry, and computer.	
Providing students the skills	a3. <u>Define</u> the basic concepts in physics,	
and the use of information technology and numerical	Education assistance, such as mathematics, chemistry, and computer.	EDU226- EDU217- EDU326—EDU427-CHEM111-
skills and quantitative ability		MATH111- PHYS 411- PHYS 421-PHYS121-
and efficiency in Oral and	d1. Take responsibility for self-learning	PHYS212-PHYS221.
written communication in	and lead the team.	
Education.		
(F \ E \	concepts and fundamental principles and theories in various fields of basic Education. Providing students the skills and the use of information technology and numerical skills and quantitative ability and efficiency in Oral and written communication in	theories of physics, in the different branches. a2.Name the basic concepts of Education in Education, and the Arabic language, and Islamic studies. a3. Define the basic concepts in physics, Education assistance, such as mathematics, chemistry, and computer. Providing students the skills and the use of information eechnology and numerical skills and quantitative ability and efficiency in Oral and written communication in various fields of basic theories of physics, in the different branches. a2.Name the basic concepts of Education in Education, and the Arabic language, and Islamic studies. a3. Define the basic concepts in physics, Education assistance, such as mathematics, chemistry, and computer. d1. Take responsibility for self-learning and lead the team.





Program Objectives	Intended Learning Outcomes	courses (Code-number)
3. Provides an opportunity for a female student to deepen her knowledge in the branches of physics so that she can views on the outskirts of modern scientific research.	b1. <u>Use</u> the principles and theories of mathematics <u>in solving</u> physics problems of different branches. b3. <u>Apply</u> the knowledge gained and the use of modern teaching strategies in explaining the physical systems. a1. <u>Recognize</u> the basics, principles, and theories of physics, in the different branches. b2. <u>Use</u> of various hardware components of the physical laboratory to conduct physical experiments. c3. <u>Develop</u> the cooperative learning	PHYS 123- PHYS 124- PHYS126-PHYS 121- PHYS 122- PHYS 213- PHYS 214- PHYS212- PHYS215- PHYS 221 PHYS223- PHYS223- PHYS224- PHYS 313- PHYS 314- PHYS 312 PHYS322 PHYS 323- PHYS 321- PHYS 324- PHYS 411- PHYS 415- PHYS 424- PHYS421- PHYS423- SLAM101- ARAB101- EDU117-
	through discussions and collaborative work in the classroom.	CHEM111- MATH111





	Program Objectives	Intended Learning Outcomes	courses (Code-number)
4.	.Compete in Labor Market, or secure acceptance in Postgraduate studies in Physics.	d1. <u>Use</u> computer programs in physical systems applications. d2.Take responsibility for self-learning and lead the team.	PHYS 411 PHYS 415- PHYS 424- PHYS421- PHYS423.
5.	Explain Physics ideas with a professional and ethical responsibility.	c2. Apply the professional and ethical . principles to the teaching profession. c1. Take into account the ethical and professional principles in the discussion of issues related to the teaching profession.	PHYS 123- PHYS 124- PHYS126-PHYS 121- PHYS 122- PHYS 213- PHYS 214- PHYS212- PHYS215- PHYS 221 PHYS223- PHYS223- PHYS224- PHYS 313- PHYS 314- PHYS 312 PHYS322 PHYS 323- PHYS 321- PHYS 324- PHYS 411- PHYS 415- PHYS 424- PHYS421- PHYS423-





	Program Objectives	Intended Learning Outcomes	courses (Code-number)
6.	Transmit Physics ideas both	c3. <u>Develop</u> the cooperative learning	PHYS 123- PHYS 124- PHYS126-PHYS 121-
	orally and in writing.	through discussions and collaborative	PHYS 122- PHYS 213- PHYS 214- PHYS212-
		work in the classroom.	PHYS215- PHYS 221 PHYS223- PHYS223-
		d1. <u>Use</u> computer programs in physical	PHYS224- PHYS 313- PHYS 314- PHYS 312
		systems applications.	PHYS322 PHYS 323- PHYS 321- PHYS 324-
		d2.Take responsibility for self-learning	PHYS 411- PHYS 415- PHYS 424- PHYS421-
		and lead the team.	PHYS423-

4.The Intended Learning Outcomes of The Courses:

The intended learning outcomes of the program are put into practice within the individual courses of the program. The intended learning outcomes for individual courses are defined in the Program Handbook, which is available on the university web pages in course specifications. The descriptions of learning outcomes of the courses are written by teachers of the courses.

The contribution of the individual course in intented learning outcomes of the program indicated in the Objective Matrix(XYZ matrix). The courses' contribution within the intended learning outcomes of the program were classified in Levels Introduce (I), Reinforce (R), and Emphasis (E). Teachers of the courses participated in the description and classification work.

The B.Ed. Program in physics in KSA is considered as a way to M.Sc. degree studies. Degree in Physics, introducing students to the scientific thinking and methods. The B.Ed. degree starts with special studies, in Physics with Mathematics, Chemistry, and university requirements. According to ASIIN's criteria, the B.Ed. degree in Physics consists of:

- 4.17 % General Educations,
- 6.94 % University requirements
- 1.39% Computer Skill
- 1.39 % Arabic Language,
- 63.88% Physics Courses,
- 18.06% Educational Courses and
- 4.17 % Field Training.

Program Learning Outcome vs courses Matrix

Identify on the table below the courses that are required to teach the program learning outcomes. Insert the program learning outcomes, according to the level of instruction, from the above table below and indicate the courses and levels that are required to teach each one; use your program's course numbers across the top and the following level scale.

Levels : I = Introduction(Introduce) R = Reinforce (Proficient) E = Emphasize (Advanced)

					NQF Learning Domains and Learning Outcomes									
		Knowledge			Knowledge Cognitive Skills				ersonal S esponsibil	Communication, Information Technology, Numerical				
	Γ	a1	a2	a3	b1	b2	b 3	c1	c2	c3	d1	d2		
	Islamic courses and University requirements		I,R,E					I,R						
	EDU 116					I		I		Е		I		
ules	EDU 117					I			I	Е				
Modules	EDU 118									Е	I			
	CHEM 111			I,R,E	Ι					Е				
	MATH 111			I										
	PHYS 111		I	I			I			Е				





		a1	a2	a3	b1	b2	b3	c 1	c2	c3	d1	d2
	EDU 126						I		I	E	I	I
	PHYS 121	I	R	R	R			I		E		R
	PHYS 122	I	R				I	R		E		R
	PHYS 123		R	R			R			Е		
	PHYS 124	I	R				I	R		E		R
	PHYS 126	I	R				I	R	R	Е		R
	EDU 216			R		I	I	I	R	E	R	R
les	EDU 217			R		I	I	I		Е	R	R
Modules	PHYS 212	R	Е				R	E		Е		Е
	PHYS 213		R			I	Е			Е		Е
	PHYS 214	R	R				R	R		E		Е
	PHYS 215	Е	Е				Е	Е		Е		Е
	EDU 226											
	PHYS 221	Е	Е		R		Е	Е	R	Е		Е





		a1	a2	a3	b1	b2	b3	c 1	c2	c3	d1	d2
	PHYS 222	E	Е					E	R	E		
	PHYS 223	Е	Е		Е		Е	Е		Е		Е
	PHYS 224	Е	Е				Е	Е	R	E		Е
	EDU 316			R		Е	Е	Е		Е	Е	Е
	EDU 317			R		Е	Е	Е		Е	Е	
	PHYS 311		Е			Е				Е	Е	Е
ules	PHYS 312		Е					Е		Е	Е	
Modules	PHYS 313							Е		Е		Е
j	PHYS 314		Е		R			Е		E	Е	
	EDU 326			R		Е	Е	Е		Е	Е	Е
	EDU 327			R		Е	Е	Е		E	Е	Е
	PHYS 321		Е		R	Е				Е	Е	Е
	PHYS 322		Е			Е				Е	Е	Е
	PHYS 323		Е			Е		Г		Е	Е	Е
	PHYS 324	a1	a2	a3	b1	b2	b3	E c1	c2	E c3	d1	E d2





	EDU 416			Е		Е	Е	Е		Е	Е	Е
	EDU 417			Е		Е	Е	Е		Е	Е	Е
	PHYS 411	Е	Е		Е				R	Е		Е
	PHYS 412		Е			Е		Е	R	Е	Е	Е
ules	PHYS 413		Е			Е			R	Е	Е	Е
Modules	PHYS 415		Е			Е			R	Е	Е	Е
	PHYS 421	Е	Е	Е	Е				Е	Е	Е	Е
	PHYS 423	Е	Е	Е	Е	Е	Е	E	Е	Е	Е	Е
	PHYS 424		Е			Е			E	E	Е	Е
	EDU 427	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е