Ministry of Higher Education and Scientific Research
Academic Supervision and Evaluation Authority
Quality Assurance and Academic Accreditation Department
Accreditation Department

Academic Program Description and Curriculum Guide

Introduction:

The educational program is a coordinated and organized package of courses that include procedures and experiences organized into study modules. The primary purpose of the program is to build and refine the skills of graduates, making them qualified to meet the requirements of the job market. It is reviewed and evaluated annually through internal or external audit procedures and programs, such as the External Examiner Program.

The academic program description provides a brief summary of the program's main features and courses, indicating the skills students are expected to acquire based on the program's objectives. The importance of this description is evident in that it represents the cornerstone of program accreditation and is written by faculty members under the supervision of academic committees in the academic departments.

This guide, in its second edition, includes a description of the academic program after updating the vocabulary and paragraphs of the previous guide in light of the new developments and changes in the educational system in Iraq, which included a description of the academic program in its traditional form (annual, semester) in

addition to adopting the description of the academic program circulated pursuant to the letter of the Department of Studies TM3/2906 dated 5/3/2023 with regard to programs that adopt the Bologna process as the basis for their work.

In this context, we cannot but emphasize the importance of writing descriptions of academic programs and courses to ensure the smooth running of the educational process.

Concepts and terms:

Academic Program Description: The academic program description provides a concise summary of the program's vision, mission, and objectives, including a precise description of the intended learning outcomes based on specific learning strategies.
Course Description: Provides a concise summary of the course's key features and the learning outcomes expected of the student, demonstrating whether the student has made the most of the available learning opportunities. It is derived from the program description.
Program Vision: An ambitious picture of the future of the academic program, one that is progressive, inspiring, motivating, realistic, and applicable.
Program Mission: Briefly articulates the objectives and activities necessary to achieve them, and identifies the program's development paths and direction.
Program Objectives: Statements that describe what the academic program intends to achieve within a specific time period, measurable and observable.
Curriculum Structure: All courses/subjects included in the academic program according to the approved learning system (semester, annual, Bologna Process), whether required by a ministry, university, college, or scientific department, along with the number of credits.
Learning outcomes: A consistent set of knowledge, skills, and values acquired by a student after successfully completing the academic program. Learning outcomes for each course must be defined in a manner that achieves the program's objectives.

Teaching and learning strategies: These are the strategies used by faculty members to develop student teaching and learning. They are plans followed to achieve learning objectives. They describe all classroom and extracurricular activities to achieve the program's learning outcomes.

Academic Program Description Form

University Name: University of Maysan
College/Institute: College of Education
Scientific Department: Department of Physics
Academic or Professional Program Title: Bachelor of Education in Physics
Final Degree Title: Bachelor of Science in Physics
Academic System: Annual
Description Date: 1/2025

Signature:
Name of Academic Assistant

Date:

Signature:
Name of Department Head:

Date

File reviewed by the Quality Assurance and University Performance Division
Name of Director of the Quality Assurance and University Performance Division:
Date:
Signature

Dean's approval

1. Program vision

The Department of Physics aspires to leadership and excellence in the field of physics education studies, achieving quality standards at the local and regional levels, distinguished academic research and program accreditation, making it a department of excellence, regionally and globally. All this is in order to contribute to the progress of the country, the development of society, and to reach the ranks of international colleges. It also aims to establish an educational environment characterized by the quality of scientific research and teaching methods through advanced technologies, ensuring the advancement of the level of the department's graduates, as well as providing an ideal environment in which students cooperate with faculty members to serve the community.

2. Program message

The Physics Department at the College of Education, University of Maysan, is committed to establishing excellence in higher education by offering distinguished educational programs in the basic sciences, enabling students to acquire basic and advanced knowledge in various fields of physics. Furthermore, it provides an appropriate environment for students to acquire the necessary skills that qualify them to compete as professionals capable of enriching the labor market. On the other hand, the Physics Department seeks to enhance the efficiency of its teaching staff in the fields of scientific research, thus contributing to the advancement and excellence of this department and college in basic and applied sciences. This will contribute effectively to solving problems in various sectors of society based on solid scientific foundations, contributing to the comprehensive development sought by the new Iraq. Preparing competent graduates with the skills and knowledge in various physics disciplines, which qualifies them to work in the states scientific, educational, and research institutions and to serve community issues.

3. Program objectives

* Preparing teaching staff to support middle, secondary and preparatory schools with the necessary teaching skills to teach physics through the department's scientific programs and activities.
* Graduating students are familiar with the basic concepts of physics.
* Students are qualified to complete postgraduate studies to support universities and institutes with teaching staff.

* Activating mechanisms of joint cooperation and openness to various universities and educational institutions at the local, regional and international levels in a manner that includes all components of the educational system.
* Working with other college departments to enter international rankings.
* Embracing distinguished and outstanding students and motivating and encouraging them to be future scientific leaders, whether as instructors or researchers.
* Working to improve and develop the capabilities and skills of faculty members and all college employees to ensure comprehensive quality management in scientific and administrative fields.
* Developing the Physics Department's laboratories in line with the quality of laboratories.

4. Program accreditation

It has not happened yet, as the program accreditation standards for educational colleges were approved on 9/8/2024, according to Circular No. J D/A 905 dated 2/22/2024.

5. Other external influences

N/A

6. Program structure

Program structure	Number of courses	Study unit	percentage	comments
Institutional Requirements	7	14	7.9	Basic
College Requirements	9	32	18.2	Optional
Department Requirements	23	122	69.3	Basic
Summer Internship	1	4	2.2	Basic
Other (Research Project)	1	4	2.2	Basic

* Notes may include whether the course is Basic or optional.

7. Program description

First stage

#	Name of the course	Number of hours		Number of units
		Theory	Practice	
1	Mechanics	3	2*	7
2	Heat and Materials Properties	2	-	4
3	Electricity and Magnetism I	3	2*	7
4	Mathematics I	3	-	6
5	Computer I	1	2*	3
6	Educational Psychology	2	-	4
7	Principal of Education	2	-	4
8	Arabic Language	2	-	4
9	English	2	-	4
10	Human Rights & Democracy	1	-	2
	Total	21	6	45

Second stage

#	Name of the course	Number of hours		Number of units
		Theory	Practice	
1	Optics	3	2*	7
2	Astronomy	2	-	4
3	Electricity and Magnetism II	3	2*	7
4	Mathematics II	3	-	6
5	Computer II	1	2*	4
6	Sound and wave motion	2	-	4
7	Secondary Educational and Educational management	2	-	4
8	Growth Psychology	2	-	4

9	Fundamental of Scientific research	2	-	4
	Total	19	6	43

Third stage

#	Name of the course	Number of hours		Number of units
		Theory	Practice	
1	Atomic and Molecular Physics	3	2*	7
2	Thermodynamics	3	-	6
3	Electronics	3	2*	7
4	Analytical Mechanics	3	-	6
5	Complex Functions	3	-	6
6	Psychology Guidance and Psychology Health	2	-	4
7	Curriculum and Methods of Teaching	2	-	4
8	Optional	2	-	4
	Total	16	10	44

Second stage

#	Name of the course	Number of hours		Number of units
		Theory	Practice	
1	Nuclear Physics	3	2	7
2	Leaser	3	-	6
3	Electromagnetic Theory	3		6
4	Quantum Mechanics	3		6
5	Solid state Physics	3		6
6	Measurement and Evaluation	2	-	4

7	**Practical Education**	**2**		**4**
8	**Research Project**	**2**	**-**	**4**
9	**Demonstration Instruments Laboratory**	**-**	**2**	**1**
	Total	**14**	**10**	**44**

8. Expected learning outcomes of the program

knowledge	
1 .Technical knowledge in the fields of physics. 2. Understanding the practical applications of physics. 3.Teamwork and communication skills. 4. Providing students with teaching, educational guidance, and classroom management skills.	1. Providing graduates with specialized scientific skills that qualify them to work and implement work related to physics. 2. Building a deep theoretical and practical scientific foundation aimed at providing graduates with knowledge of how to operate measuring and testing devices for scientific research and industrial applications. 3. Adopting sound scientific formulas in developing curricula for all academic levels, enabling graduates to acquire scientific skills in analyzing problems and finding immediate solutions. 4. Developing elective courses in the fourth year that are relevant to specific specializations in various fields of physics. The percentage of elective courses in graduate studies is expected to increase. 5. The Scientific Committee in the Physics Department is responsible for reviewing research submitted as graduate projects or the department's annual research plan. It also contributes to developing and periodically updating curricula and indirectly supervises the academic progress of students.
Skills	
1. Skills and abilities of physics program graduates. 2. Linking physical theories to their practical applications. 3. Personal skills and responsibility. 4. Cognitive skills.	1. Identify skills that support the professional development of physics teachers in their learning approaches and enrich the educational field by exploring the latest digital technologies, thus opening up new horizons for knowledge and adapting them to learner needs and learning styles. 2. Link theoretical and practical aspects in the fields of materials science and solid-state physics, and how to handle laboratory equipment used in the study of

	materials physics. 3. Learn independently, work as a team, and recognize the work of others. 4. Apply their knowledge and understanding to solve qualitative and quantitative problems of a natural nature.
values	
1. Adherence to professional ethics 2. Commitment to scientific values in the physical sciences 3. Integrity and ethics 4. Knowledge and learning	1. Explaining the importance of scientific values, which are among the most important responsibilities of education and teaching, and highlighting the importance of scientific values in countering negative messages transmitted through modern communication media. 2. The program focuses on promoting ethical values and integrity in the field of physics, and teaches students the importance of ethical rules and proper behavior in the field of technology. 3. The program enhances the value of knowledge and learning by providing an educational environment that encourages the acquisition of knowledge and the development of skills in various fields of physics.

9. Teaching and learning strategies

The teaching and learning strategies and methods adopted in implementing the program are:

1. Active and participatory learning
2. Project-based learning
3. Collaborative learning
4. Problem-based learning
5. Lecture method using technology for learning
6. Stimulating curiosity and exploration
7. Laboratory teaching strategies

10. Evaluation methods

* Monthly exams
* Daily exams
* Group projects
* Reports

Teaching staff

#	NAME	Certificate	Academic title	General and specific specialization
1	Younis Mohammad Attia Al-Zahiwat	PhD	Professor	Theoretical Physics / Lasers and Optics
2	Mohammad Kadim Hamad Al-Hashemi	PhD	Professor	Polymer and Nano film Physics
3	Baraq Talib Shalash Al-Mousawi	PhD	Professor Assistant	Applied Physics / Composite Materials
4	Mohammad Salem Jassim	PhD	Professor Assistant	Theoretical Physics / Lasers and Optics
5	Ahmed Saleh Khuraibat	PhD	Professor Assistant	Computer Engineering Technology
6	Haider Ahmed Hassan	PhD	Lecturer	Polymer Physics
7	Mohammad Siham Sada	PhD	Lecturer	Solid-State/Nano Physics
8	Duaa Hussein Hashim	PhD	Lecturer	Micro antennas
9	Wissam Ruwais	Master	Lecturer	Nanotechnology
10	Sara Qahtan Hussein	Master	Lecturer Assistant	Solid-State Physics
11	Ali Hisham Abdul-Jabbar	Master	Lecturer Assistant	Space Physics and Astronomy
12	Emad Kadim Muajib	Master	Lecturer Assistant	Complex analysis
13	Hassanein Rahim Karim	Master	Professor Assistant	Information Technology
14	Anmar Ali Kadim	Master	Lecturer Assistant	Literature and Arabic Language
15	Mai Qasim Radhi	Master	Lecturer Assistant	Modern History
16	Zahraa Hammadi	Bachelor	Physical	Physical Sciences

	Bajay		Assistant	
17	Israa Naim Abdul-Ridha	Bachelor	Physical Assistant	Physical Sciences
18	Jihan Abdul-Hussein Laibi	Bachelor	Physical Assistant	Physical Sciences

Professional development

1. Development and training programs
2. Guidance and support programs
3. Participation in workshops in the field of modern teaching methods
4. Academic guidance

Professional development for faculty members

1. Needs analysis
2. Implementation of training programs and workshops
3. Application of modern teaching strategies
4. Monitoring and evaluating performance
5. Evaluation of feedback and support

Acceptance criteria

Through the Ministry of Higher Education and Scientific Research

1. Admission is centralized
2. Parallel admission channel
3. Admission channel for senior teachers