



The document provides a comprehensive description of the Medical Physics Department at Ashur University. Below is the detailed translation:

1.Introduction to the Medical Physics Department

The Medical Physics Department at the College of Sciences, Ashur University, welcomes you to a unique environment where science meets knowledge in medical fields, diagnostic methods, and treatment. Established in the academic year 2020/2021, the department aims to integrate students into the college's academic family and equip them with advanced educational experiences. The department aspires to offer a dynamic and innovative higher education environment in Iraq. The department includes specialized classrooms and laboratories for studying medical physics, equipped to keep pace with scientific advancements. The university has invested significantly to provide modern facilities and highly qualified teaching staff from Iraq and abroad, specializing in a wide range of fields using advanced technologies. Students earn a Bachelor's degree in Medical Physics after four years, completing two semesters each academic year. The program integrates the principles of physics with modern techniques used in medicine.

2.Mission of the Medical Physics Department

To build a capable and innovative workforce in the field of medical physics, addressing the needs of local and regional communities

3.Vision of the Medical Physics Department

To achieve academic and technical excellence by providing students with in-depth knowledge and practical experience in diagnosing and treating human diseases. The vision also includes aligning this knowledge with



Ashur University
College of Science
Dep. Medical physics



the increasing demands of the job market. The department strives to be among the most distinguished scientific departments in Iraqi universities by preparing its students for work in health institutions and conducting meaningful and innovative research.

4.Goals of the Medical Physics Department

1. Ensure individual and community health by applying technical skills and advanced methods.
2. Commit to ethical conduct in healthcare provision.
3. Apply principles of scientific thinking to solve problems in medical imaging and diagnostic devices.
4. Encourage continuous research and learning among faculty and students.
5. Train students in specialized skills for careers in medical diagnostics and treatment.
6. Prepare graduates to adapt to technological advancements and excel professionally.
7. Foster collaborations with local and regional institutions in the field of medical physics

5.Core Values of the Medical Physics Department

- Commitment to quality and institutional excellence.
- Continuous assessment and development of scientific and educational activities.
- Teamwork to improve the educational process.
- Transparency in academic and administrative performance.
- Valuing the university professor as a national asset



6.Educational Structure

The department follows the same academic system implemented in Iraqi universities and is partnered with Al-Mustansiriya University through a twinning agreement.

7.Grading Distribution

- Theoretical courses:
- 20 marks for semester activities.
- 20 marks for the final exam.
- Monthly exams (minimum of two per semester).
- Practical courses:
- 20 marks distributed throughout the academic year based on student work.

8.Attendance Regulations

- First Warning: Issued if a student is absent for 5% of total class hours.
- Final Warning: Issued if a student is absent for 10% of total class hours.
- Dismissal: If a student is absent for 15% or more of total class hours

9.Examination Instructions

The department applies the examination regulations set by the Ministry of Higher Education and Scientific Research for the academic year 2020-2021.



10. Curriculum Overview

The curriculum is divided into four academic years, with each year consisting of two semesters. The following is a detailed breakdown:

First Year		Second Year	
Semester 1	Semester 2	Semester 1	Semester 2
Mechanics	Material Properties	Modern Physics	Statistical and Thermal Dynamics
Electricity	Magnetism	Heat and Thermodynamics	Digital Electronics
Mathematics	Mathematics	Analytical Mechanics	Analytical Mechanics
Computing	General Astronomy	Analog Electronics	Mathematics
Democracy and Human Rights	English Language	Mathematics	Iraqi Legal System (optional)
Arabic Language	General Chemistry	English Language	Statistical and Thermal Dynamics
Third Year		Fourth Year	
Semester 1	Semester 2	Semester 1	Semester 2
Anatomy	Physiology	Medical Devices	Medical Devices
Medical Physics	Medical Physics	Radiation Biology	Therapeutic Radiology Physics
Diagnostic Radiology Physics	Diagnostic Radiology Physics	Nuclear Medicine Physics	Health Physics
Optics (Geometric and Physical)	Quantum Mechanics	Image Processing	Biophysics
Radiation Protection	Research Methods	Elective	Electromagnetic Theory
Elective	Elective	Research Project	Elective

This detailed translation outlines the department's academic framework, its aspirations, and how it prepares students for careers in medical physics. Let me know if you need further details or specific sections emphasized!