Academic program description form

Department of Physics: Academic program description form: Academic program description form

Reviewing the performance of higher education institutions ((academic program review))

Description of the academic program

This academic program description provides a summary of the most important program characteristics and learning outcomes. What is expected of the student to achieve, proving whether he has made the most of the available opportunities. It is accompanied by a description of each course within the program.

1-The learning institution	Mosul university
2-University department/center	College of science/Physics
3- Name of the academic program	Bachelor's degree in physical sciences
4- Name of the final certificate	Bachelor's degree
5- Study system	Annually
6- Accredited accreditation program	None
7- Other external influences	None
8- Date the prepared description	2020
9- Objectives of the academic program	Graduating a student familiar with the basic concepts of physics Reg is a student who is able to apply physics to medical and industrial fields. Graduating an elite group of students who have the ability to continue graduate studies to support higher education in the future.
10-Required learning outcomes and methods of learning, learning and completion	
A- Knowledge and understanding 1. Enabling the student to gain an understanding of physics 2. Preparing qualified teachers to teach in educational institutions	
B- Subject-specific skills 1. Theoretical learning skills 2. Practical learning and data analysis skills	
Teaching and learning methods	
Theoretical and practical lectures, daily tests and discussions	
Evaluation methods	
Exams, daily tests, debates, laboratory exercises, and a graduation project.	
C- Thinking skills 1. Discussions 2. Relaxation feeding	
Teaching and learning methods	
Lectures, scientific training, applications, homework and scientific discussions	
Evaluation methods	
Exams, daily tests, debates, laboratory exercises, and a graduation project.	

D- General and developed skills (other skills learned for employability and personal development).
1. Ability to work in a multi-disciplinary team,2. Ability to communicate constructively.
Teaching and learning methods
For lectures, scientific exercises, home tests and scientific discussions
Evaluation methods
Exams, daily tests, discussions, laboratory exercises, and a graduation project.

11 .Program structure

Hours		Name of course	course code	Level/year
Theory	Practical			
3	0	Mechanics	PHYS102	1st
2	0	Arabic	PHYS103	
2	0	Human Rights	PHYS104	
3	0	Electricity	PHYS105	
2	2	Computer science I	COMP127	
3	0	Mathematics I	MATH129	
0	6	Practical Physics I (Mechanics, Electricity)	PHYS106	
2	2	General Chemistry	CHEM131	
3	0	Material Properties	PHYS107	
2	0	English	PHYS110	
2	0	Democracy	PHYS109	
3	0	Magnetism	PHYS108	
2	2	Computer science II	COMP128	
3	0	Mathematics II	MATH130	
0	6	Practical Physics II (Mechanics, Electricity)	PHYS111	
2	2	Geology	GEO101	
2	0	Thermodynamics	PHYS201	2nd
3	0	Analog Electronics	PHYS202	
2	0	Geometrical Optics	PHYS203	
2	0	Modern Physics I	PHYS204	
3	0	Mathematics III	MATH229	
3	0	Astronomy I	PHYS205	
0	9	Practical Physics I (atomic, thermal, analog)	PHYS206	
1	0	Health Culture	PHYS111	
2	0	Statistical Mechanics	PHYS207	
3	0	Digital Electronics	PHYS208	
2	0	Geometrical Optics II	PHYS209	
2	0	Modern Physics II	PHYS210	
3	0	Mathematics IV	MATH230	
3	0	Astronomy II	PHYS210	

0	9	Practical Physics II (atomic, thermal, analog)	PHYS211	
1	0	Philosophy of Science	PHYS212	
3	0	Analytical Mechanics I	PHYS301	
2	2	Mathematics and Modeling I	PHYS302	
2	0	Laser Physics	PHYS303	
2	0	Plasma Physics	PHYS304	
2	0	Crystallography	PHYS305	
2	0	Physical Optics I	PHYS306	
0	3	Practical Physics I	PHYS307	
3	0	Analytical Mechanics II	PHYS308	
2	2	Mathematic and Modeling II	PHYS309	
2	0	Laser Applications	PHYS310	**3rd**
2	0	Molecular Physics	PHYS311	
2	0	Material Science	PHYS312	
2	0	Physical Optics II	PHYS313	
0	3	Practical Physics II	PHYS314	
3	0	Quantum Mechanics I	PHYS401	
3	0	Electromagnetism I	PHYS402	
3	0	Nuclear Physics I	PHYS403	
3	0	Solid State Physics I	PHYS404	
2	0	Elective I (Solar Energy)	PHYS405	
0	6	Practical Physics I (Nuclear, Solid)	PHYS406	
3	0	Quantum Mechanics II	PHYS407	
3	0	Electromagnetism II	PHYS408	
3	0	Nuclear Physics II	PHYS409	
3	0	Solid State Physics II	PHYS410	**4th**
2	0	Elective II (Nano Physics)	PHYS411	
0	6	Practical Physics II (Nuclear, Solid)	PHYS412	
2	0	Project Research	PHYS413	
182 hours 148 credit hours		Bachelor's degree Requires (x) credit hours	Certificates and accredited hours	

12 . Planning for personal development
Extracurricular activities, scientific trips, and scientific tours
13 .The admission criterion (setting the rules for students to join the college or institute)
Central admission
14 .The most important sources of information about the program
Student guide for central admission from the Ministry of Higher Education and Scientific Research