

COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	Baghdad University / Al Khwarizmi College of engineering
2. University Department/Centre	Automated manufacturing Department
3. Course title/code	Physics I /
4. Programmers (s) to which it contributes	University Requirement
5. Modes of Attendance offered	Full time
6. Semester/Year	Semester
7. Number of hours tuition (total)	6 hours (3 theoretical +3 lab.)
8. Date of production/revision of this specification	2016-5-20
9. Aims of the Course	Students develop their engineering and physical skills in teaching , knowing some fundamental about velocity ,acceleration ,work ,energy and some properties about metal to enable the graduates to use those skills in various positions and with ease.

10· Learning Outcomes, Teaching , Learning and Assessment Methods

A- Knowledge and Understanding

A1. Begin to develop basic grammatical skills in Physics.

A2. Focus is in each subject in this course on basic grammatical skills such as velocity and their uses in different times.

B. Subject-specific skills

B1. Generate ideas, proposals and solutions or arguments independently and/or collaboratively in response to set scenarios and/or self-initiated activity.

B2. Focus on fluid and properties.

B3. Students are taught to build ideas and express them through using experiment.

B.4 Develop design briefs with clarity graphically and/or in written specifications

Teaching and Learning Methods

Theoretical literatures, problem's sheets and tutorials.

Assessment methods

Quizzes, homework, and Terminal Exams

C. Thinking Skills

C1. Teach students how to organize ideas logically, and use coherent structures.

C2. Basic information in physics.

C3. Students are trained to write paragraphs of a more organized and efficient through the application of experiment in lab.

Teaching and Learning Methods

Theoretical literatures, problem's sheets and tutorials.

Assessment methods

Quizzes, Homework, and Terminal Exams.

D. General and Transferable Skills (other skills relevant to employability and personal development)

D1. Work in groups in order to meet shared objectives.

D2. Prepare and present arguments and illustrative materials in a variety of formats.

D3. Demonstrate literacy and information sourcing and retrieval skills.

D4. Use problem solving strategies to develop innovative solutions.

11. Course Structure					
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	4		<ul style="list-style-type: none"> ○ <i>Electricity</i> ○ magnatics 	Lecture+lab.	Quizzes, Reports & Terminal Exam
2	4		<ul style="list-style-type: none"> ○ Light ○ optics 	Lecture +lab	
3	4		<ul style="list-style-type: none"> ▪ Sound ▪ 	Lecture +lab	
4	4		<ul style="list-style-type: none"> ▪ Topics include Magnetism and electricy Simple electric circuit 	Lecture +lab	
5	4		<ul style="list-style-type: none"> ▪ Electrical instruments 	Lecture +lab	
6	4		<ul style="list-style-type: none"> ▪ Generators and motor 	Lecture +lab	
7	4		<ul style="list-style-type: none"> ▪ Characters of wave motion 	Lecture +lab	
8	4		<ul style="list-style-type: none"> ▪ Power momentum 	Lecture +lab	
9	4		<ul style="list-style-type: none"> ▪ Light and illumination 	Lecture +lab	
10	4		<ul style="list-style-type: none"> ▪ Reflection ▪ refraction 	Lecture +lab	
11	4		<ul style="list-style-type: none"> ▪ interference ▪ polarization of light ▪ color 	Lecture +lab	Quizzes, Reports & Terminal Exam
12	4		<ul style="list-style-type: none"> ▪ Spectrum production and detection of sound 	Lecture +lab	
13	4		<ul style="list-style-type: none"> ▪ Properties of gases 	Lecture +lab	
14	4		<ul style="list-style-type: none"> ▪ Mechanism of hearing process ▪ Applies concepts to the construction 	Lecture +lab	
15	4		<ul style="list-style-type: none"> ▪ Charactteristics of musical instruments ▪ Design of auditoriums and concert halls 	Lecture +lab	

12. Infrastructure

Required reading: · CORE TEXTS · COURSE MATERIALS · OTHER	1. Physics for engineering book 2. General physics book
Special requirements (include for example workshops, periodicals, IT software, websites)	
Community-based facilities (include for example, guest Lectures , internship, field studies)	

13. Admissions	
Pre-requisites	
Minimum number of students	20
Maximum number of students	40