TEMPLATE FOR 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 programmed specification.

1. Teaching Institution	Al-Nahrain university-college of science
2. University Department/Centre	Physics
3. Course title/code	Mechanic
4. Modes of Attendance offered	In presence
5. Semester/Year	First / 2022-2023
6. Number of hours tuition (total)	27
7. Date of production/revision of this specification	October /2022
8 Aims of the Course	

Make the student able to:

- 1 Introducing students to the basic international units of measurement and their equivalent units previously circulated.
- 2- Introduce students to basic concepts related to static and mobile systems
- 3- Introducing the student to the methods of classifying mechanical systems, the laws related to them, and the life applications that simulate their theories
- 4- Introducing the student to the methods of mathematical solutions to problems related to kinetic systems

9. Learning Outcomes, Teaching ,Learning and Assessment Methode

Providing the student with sufficient experience to deal with kinetic systems according to the mathematical theories and laws compatible with them, and enhancing the student's mental ability to analyze kinetic systems according to those theories to find the required solutions to the problems that the student may face during study and after graduation.

B. The skills goals special to the course.

1- Practical skills

2- Analytical and inferential skills

3- Development skills

Teaching and Learning Methods

- Direct lectures that discuss the topics of lessons related to the subject

- problem solving
- Conducting scientific experiments in the laboratory

- homework

Assessment methods

- daily exams
- Monthly exams
- final exams
- Laboratory reports
- Student participation in discussions

C. Affective and value goals

1- Enabling students to solve problems related to the theoretical framework of the lecture material

2- Enabling students to think about life problems related to the lecture material

3- The link between the lecture curriculum and practical applications,

especially with our daily life

D. General and rehabilitative transferred skills(other skills relevant to employability and personal development)

- Follow up on scientific development by getting acquainted with new books and research via the Internet

10. Course Structure					
Week	Hours	ILOs	Unit/Modul e or Topic Title	Teaching Method	Assessment Method
1	2	Make the student able to deal with vectors	Introduction to vectors	blackboard + display screen	Oral and written exams + homework
2	2	Make the student able to recognize movement, speed, and acceleration in a straight line	Motion in a Straight Line	blackboard + display screen	Oral and written exams + homework
3	2	Make the student able to recognize movement, speed, and acceleration in a plane	Motion in a Plane	blackboard + display screen	Oral and written exams + homework
4	2	Make the student able to solve the exercises	Examples & Exercises	blackboard + display screen	Oral and written exams + homework
5	2	Mid exam	1 st Exam		
6	2	Make the student able to identify Newton's laws of motion and their applications to kinetic systems	Newton's Laws	blackboard + display screen	Oral and written exams + homework
7	2	Make the student able to understand applications of Newton's laws	Application of Newton's Laws	blackboard + display screen	Oral and written exams + homework
8	2	Make the student able to solve problems involving Newton's laws and their applications	Examples & Exercises	blackboard + display screen	Oral and written exams + homework
9		Mid exam	2 nd Exam		
10	2	make the student	Force and Friction	blackboard + display screen	Oral and written exams + homework

		know the concept of force and friction			
11	2	To make the student able to identify the concepts of work, energy and power in mechanical systems	Work, Energy and Power	blackboard + display screen	Oral and written exams + homework
12	2		Examples & Exercises	blackboard + display screen	Oral and written exams + homework
13	2		Full review	blackboard + display screen	Oral and written exams + homework
14		Final exam	3 rd Exam		
15					

- 11. Infrastructure
 - Classroom
 - mechanic lab

1. Books Required reading:	
2. Main references (sources)	University physics with modern physics, 13 th edition
A- Recommended books and references (scientific journals, reports).	Scientific question solving book
B-Electronic references, Internet sites	

12. The development of the curriculum plan

Mechanics is one of the fundamental sciences that are known for their complete and integrated theories and applications. It is thus not subject to modernization and development in the theoretical construction of the article. Thus, course development depends on our attempt to introduce students to different mechanical systems and find their applications in practical life. We also seek to develop practical experiments related to the theoretical construction of the scientific subject. The course and its approach to student feeding are continually subject to evaluation in light of our examination of students' understanding and development of analytical skills for problems related to this subject. This is done through direct discussions and evaluation of students' answers in daily and monthly exams and tests.