Course Description Form

1. Course Name:
General Physics
2. Course Code:
AGFM23_F 1051
3. Semester / Year:
First semester/2024-2025
4. Description Preparation Date:
March/25/2024
5. Available Attendance Forms:
In-person education + blended education
6. Number of Credit Hours (Total) / Number of Units (Total)
(2 Hours theoretical + 3 Hours Lab.)/5 units
7. Course administrator's name (mention all, if more than one name)
Dr. Mohammed Hussin Ahmed Al-Mola

8. Course Objectives

Course Objectives	• Preparing successful graduates in the field of agricultural extension to work in production departments and other institutes and to contribute to the development plan of education. • Enabling students to work efficiently as a team with other specializations. • Developing the student's capabilities in research and development

9. Teaching and Learning Strategies

Strategy	• in person lectures and the method of writing on the whiteboard • Practical lectures in laboratories • Scientific seminars and direct dialogue between the teacher and the students • Methods of small educational groups

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2 Theory	Knowing the states of matter and comparing them	States of matter: hypotheses of kinetic theory		
2		Identify the mechanical properties of static fluids1.	Mechanical properties of static fluids include types of fluids, density properties,		

	+ 3 Lab.		relative density, pressure, and its units.	A person-lecture using the whiteboard	Attending, quizzes, Assignments, class participations
3		Identify the mechanical properties of static fluids 2	Liquid pressure, gas pressure, volumetric elastic modulus of fluids, discussion of previous materials		
4		Specialized mechanical properties	The phenomenon of surface tension, the capillary property, the capillary property of soil, applications of surface tension, the osmotic phenomenon, osmotic pressure.		
5			Exam-1		
6	2 Theory + 3 Lab.	Identify the mechanical properties of moving fluids	Mechanical properties of moving fluids: types of flow and critical speed	A person-lecture using the whiteboard	Attending, quizzes, Assignments, class participations
7		Identify the important Bernoulli equation in moving fluids	Bernoulli's equation and its practical applications, with solving problems about applications of Bernoulli's equation		
8		Learn about the Venturi scale.	Venturi scale and Torricelli equation		
9		Learn about the concept of viscosity and how to measure the viscosity of moving fluids	The concept of viscosity and how to measure it		
10		Learn about Bernoulli's equation and its mathematical applications	Solve problems with Bernoulli's equation and viscosity		
11		Students are introduced to weather concepts specific to the major and atmospheric physics	Atmospheric physics and layers of the Earth's atmosphere		
12		Identify the elements of the atmosphere	How do pressure and temperature change with altitude?		
13			Exam-2		

11.Course Evaluation

The score out of 100 is Distributed according to the tasks assigned to the student such as Quizzes, Questions Sheets, Attending, Participation, Sem-Exam, Lab., and Final exam as follow:

Quizzes: 5%
Questions Sheets: 10%
Attending: 2.5%
Participation: 2.5%
Sem-Exam: 10%
Lab.:10%
Final exam: 60%

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	General Physics by Dr. Amjad Karjieh

Main references (sources)	General Physics by Dr. Amjad Karjieh + Assistant Lieutenant + Practical Physics Lieutenant
Recommended books and references (scientific journals, reports...)	All physics sources that talk about the properties of matter
Electronic References, Websites	All solid electronic references related to fundamental physics