COURSE OUTLINE

Course Number & Title	20147, Physics I Lab
Semester	First Semester 2021-2022
Credit Hours	zero
Instructor	Khalid F. Kaddoumi, k.kaddoumi@psut.edu.jo
Course Type	In lab. Experiments
Required or Elective	Mandatory for all students
Course Schedule	3 hours/week
Course Assessment & Grading Policy	Lab reports 40% Midterm practical Exam 20% Final Practical Exam 40%
Course Prerequisites	Physics I (20141)/Co-requisite
Catalog Description	**Co-requisite: 20141** Introduction to Errors and Graphs, Basic Measurements, Static Equilibrium, The Laws of Motion, Simple Harmonic Motion, Moment of Inertia, Viscosity.
Textbook and Related Course Materials:	• "Laboratory Manual for Experiments in Physics I", Prepared by the instructor. • PSUT E-Learning Website.
Topics Covered:	• To give an idea about the errors propagation in mathematical operations and to use the graphical method to obtain the desired results. • To be familiar with different types of measuring tools • The concept of static equilibrium and the resultant of different forces acting on a body. • Using Newton's second law to determine the acceleration due to gravity. • The properties of a simple harmonic motion. • Measuring the moment of inertia of different geometrical shape objects.
Contribution to the Professional Component	General Education: 20% Mathematics & Basic Sciences: 80%
Expected Level of Proficiency for Students Entering the Course	Mathematics: Good Physics: Good Technical writing: Not Applicable Computer programming: Not Applicable

Materials Available to Students & Department at End of Course

	Stu.	Dept.	Instr.	TA(s)
Course objectives and outcomes:	✓	✓	✓	
Lecture notes:	✓		✓	
Samples solutions from students:		✓		
Course Assessment by Students (CAS):		✓	✓	
Course Assessment by Faculty (CAF):		✓	✓	

Will This Course Involve Computer Assignments?	No
Will This Course Have TA(s) When it is Offered?	No

Upon completion of this course, students will have had an opportunity to learn about the following:

	Specific Course Outcomes	Student Outcomes
1.	Be able to validate physical theories in quantitative manner.	1
2.	Teaching the limitations inherent in the application of physical theories to real physical situations.	1
3.	The ability to work as a member of a team and agree upon exactly what needs to be done and who shall perform each task.	1
4.	Submit a lab report for each experiment performed, the recommended format should adhere closely.	1
5.	The ability to interpreting results and comparing it with the theoretical expectations.	1
6.	The ability to use different tools and measuring devices in a correct manner to perform the experiments.	1