



UNIVERSITI TEKNOLOGI MARA

PHY110: MECHANICS I

Course Name (English)	MECHANICS I APPROVED	
Course Code	PHY110	
MQF Credit	3	
Course Description	Mechanics I enables students to apply and respond to the basic and important principles and the related conditions in the topics that include physical units, measurements, one dimensional motion, two-dimensional motion, Newton's laws, work and energy, and linear momentum through learning by lecture, tutorial discussion and scientific investigations.	
Transferable Skills	1. Demonstrate ability to identify and articulate self skills, knowledge and understanding confidently and in a variety of contexts. 2. Demonstrate ability to apply creative, imaginative and innovative thinking and ideas to problem solving.	
Teaching Methodologies	Lectures, Lab Work, Tutorial, Presentation	
CLO	CLO1 Apply the concept and theories of motions in basic mechanics. CLO2 Perform (plan, conduct and analyse outcomes of) scientific investigations in area of mechanics. CLO3 Demonstrate good values in scientific investigations in the area of mechanics.	
Pre-Requisite Courses	No course recommendations	
Reading List	Recommended Text	• Jearl Walker, Robert Resnick 2018, <i>Halliday and Resnick Fundamentals of Physics</i> , 4th Ed. Ed., Wiley [ISBN: 9781119306856]
	Reference Book Resources	• Raymond A. Serway, Chris Vuille 2016, <i>College Physics</i> , 11 Ed., Cengage Learning [ISBN: 9781305952300] • David P. Young (Physics professor), John D. Cutnell, Shane Stadler 2019, <i>Cutnell & Johnson Physics</i> , 11 Ed., Wiley [ISBN: 9781119391869] • Raymond A. Serway, John W. Jewett 2018, <i>Physics for Scientists and Engineers</i> , 10 Ed., Cengage Learning [ISBN: 9781337553278] • Hugh D. Young, Roger A. Freedman 2019, <i>University Physics with Modern Physics</i> , 15 Ed., Pearson [ISBN: 9780135159552] • Randall D. Knight 2016, <i>Physics for Scientists and Engineers</i> , 4 Ed., Addison-Wesley [ISBN: 9780133942651]
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	