



UNIVERSITI TEKNOLOGI MARA

PHY150: ELECTRICITY AND MAGNETISM

Course Name (English)	ELECTRICITY AND MAGNETISM APPROVED	
Course Code	PHY150	
MQF Credit	3	
Course Description	In Electricity and Magnetism, topics include Electric Charge, Electric Field, Electric Potential, Capacitance, Electric Current, DC Circuits, Magnetism, Inductance and Alternating Current.	
Transferable Skills	Knowledge, practical skills and teamwork	
Teaching Methodologies	Lectures, Blended Learning, Lab Work, Tutorial, Simulation Activity, Problem Based Learning (PBL), Presentation	
CLO	CLO1 Apply the concepts, laws and theories in electricity and magnetism. CLO2 Perform (plan, conduct and analyze outcome of) scientific investigations in areas of electricity and magnetism. CLO3 Demonstrate active collaboration with team members in performing scientific investigations in area of electricity and magnetism problems.	
Pre-Requisite Courses	No course recommendations	
Reading List	Recommended Text	• Karl F. Kuhn, Frank Noschese 2020, <i>Basic Physics</i>, John Wiley & Sons [ISBN: 9781119629900] • Harry Edwin Hadley 2022, <i>Magnetism & Electricity for Beginners</i>, Legare Street Press [ISBN: 9781017125474]
	Reference Book Resources	• John Henry Poynting 2020, <i>A Text-Book of Physics: Electricity and Magnetism</i>, Alpha Edition [ISBN: 9789354182433] • Jerry D. Wilson, Anthony J. Buffa, Bo Lou 2022, <i>College Physics Essentials, Eighth Edition (Two-Volume Set)</i>, 1 Ed., CRC Press [ISBN: 9780815355465] • P. F. Kelly 2021, <i>Electricity and Magnetism</i>, 1 Ed., CRC Press [ISBN: 9780367783693] • Mattia Crivellini 2024, <i>Electricity and Magnetism (Let's Experiment)</i>, White Star Kids [ISBN: 9788854417298]
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	