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Deposited on: 10 March 2014
Title: Physics II – For Dummies
Author: Steven Holzner, PhD
Subject Area: Physics
Description: This book aims to expand upon the physics covered within Physics I – for Dummies and provides ‘a crash course on the main topics covered in a typical Physics II course.’
Date/Edition: 2010
ISBN: 978-0-470-53806-7
Level: Primarily Level 2 students but applicable to anyone with an interest in physics.
Price: £14.99

Review
This book is promoted as the sequel to a physics I course and is aimed at expanding on the topics normally encountered within a standard physics I class. Particular emphasis has been placed on electromagnetism, waves, energy and matter. The reviewer has approached this book with a background in A-Level physics with some small use of similar level physics in my working environment.

The content is clearly laid out and structured in a very reader friendly format. Various icons, shaded boxes detailing more advanced theories/points of interest etc helps guide the reader through the content and identify further study if the reader wishes to expand on a chosen concept.

Part one acts as a brief review of Physics I and gives a quick introduction to the topics the reader will cover throughout the book. This quickly allows the reader to determine if their current knowledge is sufficient to engage totally with the content. I do feel that some questions/tasks to test the readers knowledge would help assure the reader of the level of knowledge required.

Parts 2 to 4 cover electromagnetism, waves, and modern physics (mainly special relativity and nuclear physics) respectively. The last chapter details ground breaking experiments in these areas with links to online sources that can be useful for various
problem solving exercises. This nicely rounds off the book and clearly allows the reader to continue their study if they so wish.

The chapters within each specific section cover a unique topic with helpful ‘tip’ and ‘remember’ sections. I particularly liked the examples of the principals being used in the real world. There are, obviously, extensive equations and calculations used throughout the book with worked examples of most. There is no space for the reader to test that they can apply these equations in a correct manner. There are some additional resources available from the Dummies website but again no opportunity to test the reader’s knowledge. With practice using these equations being essential for understanding I feel that some tasks for the reader may be beneficial.

The layout is perhaps less useful for a teacher/lecturer as the book is not designed to act as a textbook for a specific course. However the topics covered are clearly identified on the cover and should easily attract students who identify a need to explore these areas further.

There is very little else to say - this book does exactly what it says on the cover. The text is well presented with informative illustrations, examples and guiding points for the reader. The information was informative and understandable for the reviewer who has not encountered these topics in this depth for several years.

Scores
Academic Content  4
Usefulness to Students 3
Usefulness to Teachers 2
Meets Objectives  4
Accuracy 5
Physics II For Dummies walks you through the essentials and gives you easy-to-understand and digestible guidance on this often intimidating course. Thanks to this book, you don’t have to be Einstein to understand physics. As you learn about mechanical waves and sound, forces and fields, electric potential and electric energy, and much more, you’ll appreciate the For Dummies law: The easier we make it, the faster you’ll understand it! An extension of the successful Physics I For Dummies Covers topics in a straightforward and effective manner. Explains concepts and terms in a fast and ... Book Preview. Physics II For Dummies - Steven Holzner. wholeheartedly.

Part I. From Physics II For Dummies. By Steven Holzner. Here’s a list of some of the most important equations in Physics II courses. You can use these physics formulas as a quick reference for when you’re solving problems in electricity and magnetism, light waves and optics, special relativity, and modern physics. Physics Equations for Electricity and Magnetism. Electricity and magnetism make up one of the most successful fields of study in physics. When working mathematically with electricity and magnetism, you can figure out the force between electric charges, the magnetic field from wires, and more.