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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 reader’s 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