Although all of the programs discussed in the text can be downloaded freely, most are listed in the text to encourage students to read them carefully. Students might find some useful techniques that they can use elsewhere, and the discussion in the text frequently refers to the listings.

A casual perusal of the text might suggest that the text is bereft of figures. One reason that we have not included more figures is that most of the programs in the text have an important visual component in color. Black and white figures pale in comparison. Much of the text is meant to be read while working on the programs. Thus, students can easily see the plots and animations produced by the programs while they are reading the text.

As new technologies become available and the backgrounds and expectations of students change, the question of what is worth knowing needs to be reconsidered. Today, calculators not only do arithmetic and numerical operations, but most can do algebra, calculus, and plotting. Students have lost the sense of number and most can only do the simplest mathematical manipulations in their head. On the other hand, most students feel comfortable using computers and gathering information off the Web. Because there exist programs and applets that can perform many of the simulations in this text, why should students learn how to write their own programs? We have at least two answers. First, most innovative scientific research involves writing programs that do not fit into the domains of existing software. More importantly, we believe that students obtain a deeper understanding of the physics and the algorithms themselves by writing and modifying their own programs. Just as we need to insure that students can carry out basic mathematical operations without a calculator so that they understand what these operations mean, we must do the same when it comes to computational physics.

The recommended readings at the end of each chapter have been selected for their pedagogical value rather than for completeness or for historical accuracy. We apologize to our colleagues whose work has been inadvertently omitted, and we would appreciate suggestions for new and additional references.

Because students come with a different skill set than most of their instructors, it is important that instructors realize that certain aspects of this text might be easier for their students than for them. Some instructors might be surprised that much of the code for organizing the simulations is "hidden" in the Open Source Physics library (although the source code is freely available). Some instructors will initially think that Chapter 2 contains too much material. However, from the student's perspective this material is not that difficult to learn. They are used to downloading files, using various software environments, and learning how to make software do what they want. The difficult parts of the text, where instructor input is most needed, is understanding the physics and the algorithms. Converting algorithms to programs is also difficult for many students, and we spend much time in the text explaining the programs that implement various algorithms. In some cases instructors will find it difficult to set up an environment to use Java and the Open Source Physics library. Because this task depends on the operating system, we have placed instructions on how to set up an environment for Java and Open Source Physics at `<opensourcephysics.org>`. This website also contains links to updates of the evolving Open Source Physics library as well as other resources for this text including the source code for the programs in the text.

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No book of this length can be free of typos and errors. We encourage readers to email us about errors that they find and suggestions for improvements. Our plan is to continuously revise our book so that the next edition will be more timely.

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