

Charles E. Wilson  
Krieger Publishing Company, Malabar FL, 2006, 618 pp. (hardcover)  
ISBN: 1-57524-237-0

The revised edition of Noise Control by Charles E. Wilson consists of two parts: The first is the previous revision of the book that has an original publication copyright of 1989 and a revision with corrections was published in 1994. The second part is a 30 page supplement. The supplement provides some additional comments and references to update the material in the text. The supplement is referenced well in the text and in the supplement so that the new material can be quickly identified.

The new material in the supplement is rather limited. There are many advances in measurement systems, equipment, and modeling since 1994 that are not included. Therefore, one should consider purchasing this book primarily on the quality of the original book that was published in 1989 and revised with corrections in 1994.

The text is written for teaching a noise control course, complete with many problems at the end of each chapter and partial answers to selected problems in the appendix. Overall the book does a nice job of covering the basic material for an undergraduate noise control course that focuses on practical aspects of noise control more than underlying theory.

As a person who teaches such a course, I like the book in that it covers the basics well. However, I would need to think carefully before using this book because of how the students would react to some of the elements of the book that present outdated material. The basics are well done and clear and many of the noise control examples are also well presented and continue to be pertinent, however, there are elements of the book that need to be updated. It would likely take significant effort as an instructor to provide updated information for students in the course.

The book is written with a mix of theory and applications throughout. The first chapter covers basics of sound and basic measurements. The second chapter presents propagation, covering simple source radiation, room acoustics, and barriers. In the third chapter, basic instrumentation and measurements are discussed. Chapters 4 and 5 present hearing conservation and community noise. Chapters 6, 7, 8 and 9 present noise control examples of building design, industrial noise control, highway noise, and aircraft noise. The final chapter presents an overview of vibration analysis.

There is an extensive use of block diagrams to describe calculations and decision processes. This is not a common way to currently communicate this information. However, these process flow diagrams are starting to take hold in the work on Lean and Six Sigma design processes.

The discussion of computational tools is generic rather than specific to tools currently available. Some missing elements include presentations of methods such as statistical energy analysis that are becoming standard tools for many noise control engineers.

The options for a text book for an undergraduate noise control book are few and one is often left to supplement a text because of limited coverage of some areas that an instructor wants to cover. While not updated, this book does continue to present an option that can be made to work.

*J. Adin Mann III  
Mechanical Engineering Department  
2032 Black Engineering Building  
Iowa State University  
Ames IA 50011*