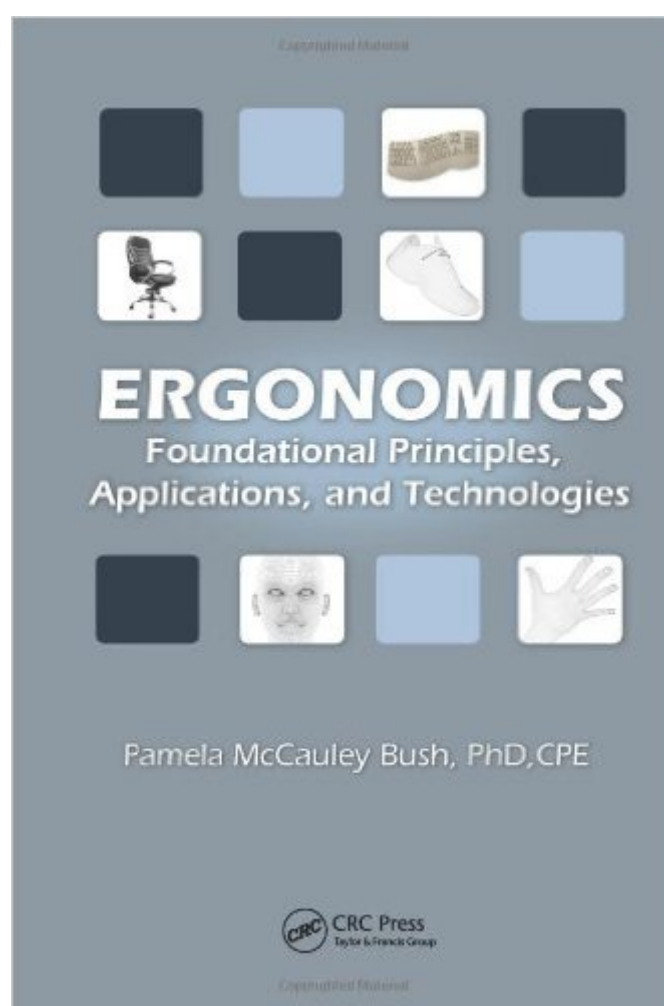


The book was found

# Ergonomics: Foundational Principles, Applications, And Technologies (Ergonomics Design & Management Theory & Applications)



## Synopsis

A complete introduction to the field, *Ergonomics: Foundational Principles, Applications and Technologies* discusses scientific principles, research, applications, and emerging trends in technology. Covering the foundational principles and major topics in physical ergonomics, the book contains the necessary components of a quality ergonomics course, including a sample course syllabus, PowerPoint slides for instructors and students, homework assignments, class projects, instructor's manual, suggested lab equipment, proposed lab exercises, and a student laboratory manual. Based on the author's almost two decades of teaching, the text covers basic ergonomic principles from research and application perspectives. It includes hands-on laboratory activities to complement classroom instruction and cases studies that demonstrate application of ergonomic knowledge. Using an approach that highlights the physical over the cognitive, the author focuses less on kinesiology principles and more on applied kinesiology in ergonomics. Provides a basic explanation of the systems of the body to establish a foundation for understanding and consistently applying ergonomic principles Covers the human senses and the sensory process for each, including tools and techniques for assessing sensory impact Explains the functionality, relationship, and elements of the integrated roles of the muscular system and nervous system Introduces the study of anthropometrics and the principles that can be used to support anthropometric design, including data collection, calculation of statistics, and identification of appropriate data sources Examines the basic ergonomic principles of work place design and evaluation of hand tools Discusses the origin, nature, and impact of work-related musculoskeletal disorders (WMSDs) in the global community Includes coverage of the concepts of information processing, measurement of mental workload, and an introduction to ergonomic design of controls and displays The book supplies everything required to teach the class. Upon completion of a course using this book, students will be prepared to apply the ergonomic knowledge in industry or continue to higher levels of study in the field. The text builds the foundation students and professionals need to understand and improve the environments, equipment, and systems with which humans interact in the workplace, recreational environment, and home. Description of Instructors Manual Available upon course adoption, the instructor's manual contains resources to assist in quickly establishing a course layout, schedule, and associated documents. This resource genuinely makes the selection of the text a "turn-key" option for the professor to deliver a high-quality ergonomics course. Sample course syllabus Summary of suggested ergonomic lab equipment Sample course schedule Description of assignments such as student projects and more. Description of Laboratory Manual Available for download from [www.crcpress.com](http://www.crcpress.com), the

laboratory manual contains multiple laboratory and application assignments to give student a hands-on experience in applying ergonomic material taught in the classroom lectures. The manual has labs for each of the primary topics covered in the course as well as guidelines on how students are to conduct the laboratories and prepare lab reports. Numerous tables, equations, and examples are provided in the lab manual to facilitate student understanding of the material. The use of the lab manual supports the instructor by providing tailored exercises for students to perform that are directly aligned with the textbook material. Assignments are also provided for students taking the course via distance learning or remote resources.

## **Book Information**

Series: Ergonomics Design & Management Theory & Applications

Hardcover: 356 pages

Publisher: CRC Press; 1 edition (December 13, 2011)

Language: English

ISBN-10: 1439804451

ISBN-13: 978-1439804452

Product Dimensions: 6.1 x 0.9 x 9.3 inches

Shipping Weight: 1.4 pounds (View shipping rates and policies)

Average Customer Review: 4.7 out of 5 stars [See all reviews](#) (6 customer reviews)

Best Sellers Rank: #794,404 in Books (See Top 100 in Books) #81 in [Books > Engineering & Transportation > Engineering > Industrial, Manufacturing & Operational Systems > Ergonomics](#) #303 in [Books > Engineering & Transportation > Engineering > Industrial, Manufacturing & Operational Systems > Health & Safety](#) #413 in [Books > Engineering & Transportation > Engineering > Industrial, Manufacturing & Operational Systems > Industrial Design](#)

## **Customer Reviews**

Ordered the kindle version (for PC) of this for school. Ctrl F is a verrrry helpful tool and makes the work go by a lot faster. Would much rather all my books be kindle books. Has a lot of neat information you wouldnt think would be in an ergonomics book.

This book is an easy read, with great information presented. The author seems very knowledgeable about the subject and lays it out in such a way that there seems to be a nice natural progression.

The author has experience on solving real live problems. Text is based much more on science and

statistics than aesthetics

[Download to continue reading...](#)

Ergonomics: Foundational Principles, Applications, and Technologies (Ergonomics Design & Management Theory & Applications) Aircraft Interior Comfort and Design (Ergonomics Design Management: Theory and Applications) Human Computer Interaction Handbook: Fundamentals, Evolving Technologies, and Emerging Applications, Third Edition (Human Factors and Ergonomics) Occupational Ergonomics: Engineering and Administrative Controls (Principles and Applications in Engineering) The Inequality Reader: Contemporary and Foundational Readings in Race, Class, and Gender Atkins Diet: Foundational Steps to Shave Off Pounds With the Atkins Diet and Increase Energy (Overweight, Low Carb, Heart Disease, Exercise, Robert Atkins) Foundational Fictions: The National Romances of Latin America (Latin American Literature and Culture) Seeking the Sakhu: Foundational Writings for an African Psychology Am I Screwing Up My Kids?: 8 Foundational Concepts to Close the Conscious Parenting Gap The Black Scriptures: Foundational Rituals of Maergzjiran Magick Foundational Issues in Christian Education: An Introduction in Evangelical Perspective Foundational Math Skills - 100 Numbers - Wildlife Coloring Book: Fun-Schooling with Art, Creativity & Logic - 1st, 2nd & 3rd Grades CMOS SRAM Circuit Design and Parametric Test in Nano-Scaled Technologies: Process-Aware SRAM Design and Test (Frontiers in Electronic Testing) Principles of Forensic Human Factors/Ergonomics Wireless Positioning Technologies and Applications, Second Edition (Gnss Technology and Applications) Ergonomics: How to Design for Ease and Efficiency (2nd Edition) Human Factors and Ergonomics Design Handbook, Third Edition Work Design: Occupational Ergonomics Web 2.0 and Beyond: Principles and Technologies (Chapman & Hall/CRC Textbooks in Computing) OpenVMS Alpha Internals and Data Structures: Memory Management (HP Technologies)

[Dmca](#)