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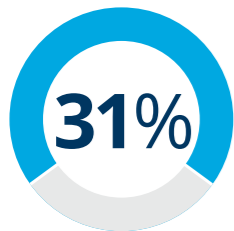


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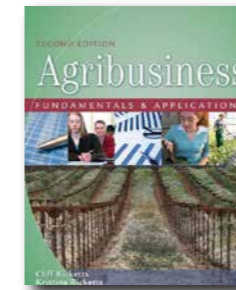
AGRIBUSINESS

AGRIBUSINESS

AGRIBUSINESS FUNDAMENTALS AND APPLICATIONS, SOFT COVER, 2E

Cliff Ricketts, PhD., Middle Tennessee State University, Murfreesboro, Tennessee; Kristina G. Ricketts, PhD.

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Agribusiness: Fundamentals and Applications, second edition, discusses the broad spectrum of the agribusiness world. Several chapters focus on the agricultural input sector, which are the supplies and services needed by ranchers, farmers, and or other production agriculturists. Some examples include the feed, seed, fertilizer, chemical, and farm machinery agribusinesses. Once basic production economics and farm management are discussed, several more chapters cover the agribusiness output sectors that include agribusinesses, which move food and fiber from the farms and ranches to the consumer. The fundamentals and applications of agribusiness are detailed showing how products go from their source to the consumer highlighting the many steps in this process. Basic principles of commodity marketing, international agriculture marketing and food and fiber processing channels are some of the topics explored in detail. Basic agricultural economic principles are discussed to assist the user to better manage an agribusiness. This book not only discusses employment opportunities, but also explains how to start-up, run and manage your own agribusiness.

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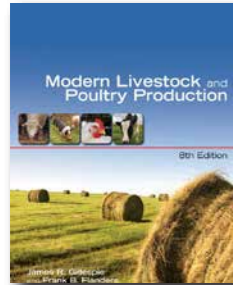
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MODERN LIVESTOCK & POULTRY PRODUCTION, 8E

James R. Gillespie, Illinois State Board of Education, Springfield, Illinois; Frank Flanders, University of Georgia

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Modern Livestock and Poultry Production, 8th Edition, entices and engages readers with new, full-color photographs and illustrations, and up-to-date comprehensive agriscience and production information covering major and minor livestock and poultry

animals.

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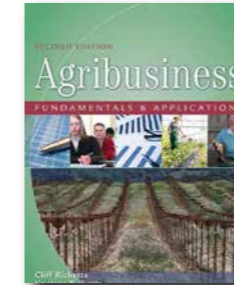
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AGRIBUSINESS FUNDAMENTALS AND APPLICATIONS, 2E

Cliff Ricketts, PhD., Middle Tennessee State University, Murfreesboro, Tennessee; Kristina G. Ricketts, PhD.

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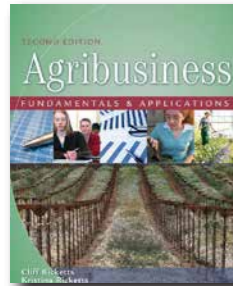
AGRISCIENCE

AGRIBUSINESS

AGRIBUSINESS FUNDAMENTALS AND APPLICATIONS, SOFT COVER, 2E

Cliff Ricketts, PhD., Middle Tennessee State University, Murfreesboro, Tennessee; Kristina G. Ricketts, PhD.

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Agribusiness: Fundamentals and Applications, second edition, discusses the broad spectrum of the agribusiness world. Several chapters focus on the agricultural input sector, which are the supplies and services needed by ranchers,

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LAB MANUAL FOR FLANDERS' MODERN LIVESTOCK & POULTRY PRODUCTION, 9TH, 9E

Frank Flanders, University of Georgia; James R. Gillespie, Illinois State Board of Education, Springfield, Illinois

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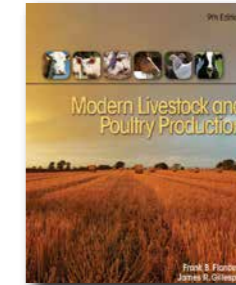
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MODERN LIVESTOCK & POULTRY PRODUCTION, 9E

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Designed to prepare you for a career in the livestock industry, the Ninth Edition of MODERN LIVESTOCK AND POULTRY PRODUCTION has been revised to include the most up-to-date, comprehensive information in the field. With coverage of basic animal

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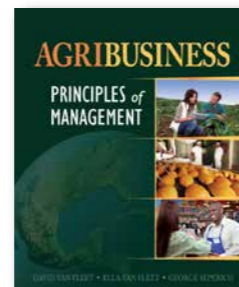
AGRIBUSINESS

Principles of Management

David Van Fleet, Morrison School of Management and Agribusiness, College of Technology and Innovation, Arizona State University; Ella Van Fleet, Professional Business Associates; George J. Seperich, Morrison School of Management and Agribusiness, College of Technology and Innovation, Arizona State University

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Intended for all segments of agribusiness as well as non-agribusiness organizations,

AGRIBUSINESS:PRINCIPLES OF MANAGEMENT presents the changing face of agribusiness in a format that is interesting, straightforward, and easy to understand. This comprehensive text approaches agribusiness as a technology-oriented industry composed of organizations ranging in size from small, family-owned farms or businesses to some of the largest corporations in the world. With multiple opportunities for self-review as well as vignettes, cases, and examples in each chapter, this text shows you the real-world application of what you are learning and provides you with a solid understanding of what management is all about. Coverage of both the principles of business as well as the nuances of agribusiness gives you the unique skills you need in order to apply your knowledge and harness valuable resources.

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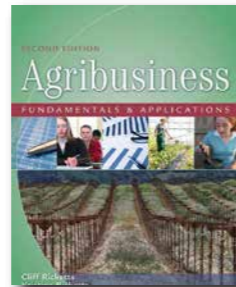
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AGRIBUSINESS FUNDAMENTALS AND APPLICATIONS, 2E

Cliff Ricketts, PhD., Middle Tennessee State University, Murfreesboro, Tennessee; Kristina G. Ricketts, PhD.

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INTRODUCTION TO AGRICULTURAL ACCOUNTING

Barbara M. Wheeling

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Introduction to Agricultural Accounting offers an approach for compiling and analyzing accounting information specific to agricultural operations. Unlike typical accounting books, this text addresses the issues and situations unique to the agricultural

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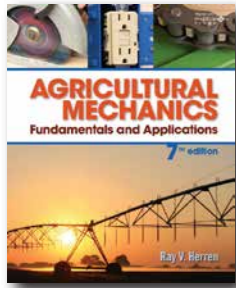
AGRICULTURAL EDUCATION

AGRICULTURAL MECHANICS: FUNDAMENTALS AND APPLICATIONS UPDATED, PRECISION EXAMS EDITION, 7E

Ray V. Herren, University of Georgia, Athens (Emeritus)

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Beyond providing a thorough introduction to the field of agricultural mechanics, the Precision Exams Edition of this trusted text aligns to Precision Exams' Agricultural Systems Technology, Level 1 exam. The text covers fundamental mechanical

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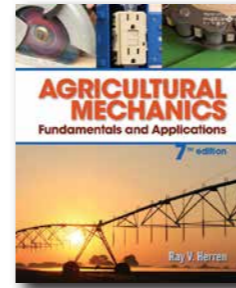
AGRICULTURAL MECHANICS

AGRICULTURAL MECHANICS: FUNDAMENTALS AND APPLICATIONS UPDATED, PRECISION EXAMS EDITION, 7E

Ray V. Herren, University of Georgia, Athens (Emeritus)

© 2019, 864pp, Hardback, 9781337918701

CENGAGE | MINDTAP **ebook**



Beyond providing a thorough introduction to the field of agricultural mechanics, the Precision Exams Edition of this trusted text aligns to Precision Exams' Agricultural Systems Technology, Level 1 exam. The text covers fundamental mechanical

and engineering theory, common tools and materials, and practical applications including shop orientation and procedures, woodworking and metalworking, tool fitting, project planning, cutting and welding, paints and paint application, power mechanics, electrical wiring, plumbing, hydraulics, concrete and masonry, and agricultural structures. Safety is also emphasized strongly throughout the text, and a dedicated unit introduces students to diverse career opportunities. The current edition also features new information on the National FFA Organization and SAEs, first aid, and engine powered equipment, as well as new activities and lab exercises.

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LAB MANUAL FOR HERREN'S
AGRICULTURAL MECHANICS:
FUNDAMENTALS & APPLICATIONS
UPDATED, PRECISION EXAMS
EDITION, 7TH, 7E

Ray V. Herren, University of Georgia, Athens (Emeritus)

© 2015, 432pp, Paperback, 9781285059013

ebook



The Laboratory Manual is a valuable tool designed to enhance your lab experience. This comprehensive workbook tests students' knowledge and reinforces learning of text content. Job sheets for each unit include an objective, tools and materials needed, and a procedure with short answer questions, procedural checklists, image labeling activities, or other activities meant to reinforce comprehension of unit content.

WELDING AND METAL FABRICATION,
INTERNATIONAL EDITION

Larry Jeffus, Eastfield College (Emeritus)

© 2012, 800pp, Paperback, 9781111308056

ebook



WELDING AND METAL FABRICATION, International Edition employs a unique hands-on, project-based learning strategy to teach welding skills effectively and keep you motivated. This groundbreaking new text connects each welding

technique to a useful and creative take-home project, making exercises both practical and personal—and avoiding the tedium of traditional, repetitive welding practices. To further enhance the learning process, every welding project includes a set of prints with specifications, like those used in production fabrication shops. This full-featured approach to skill-building reflects the reality of professional welding, where following prints and instructions precisely and laying out, cutting out, and assembling weldment accurately are just as essential as high-quality welding. The included projects are small to conserve materials during the learning process, but detailed instructions and abundant photos and illustrations guide you through a wide range of fabrication skills. Key steps and techniques within the small projects are also linked to larger projects presented at the end of each chapter, enabling you to apply what you have learned by fabricating and welding something more substantial. This thorough, reader-friendly text also covers relevant academics, such as shop math and measurement, and prepares you for real-world success by having you document your time and materials for each project and prepare a detailed invoice.

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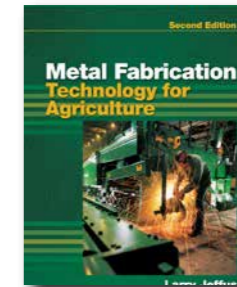
1. Introduction.
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28. Weldability of Metals.
29. Welder Certification.
30. Testing and Inspecting Welds.

METAL FABRICATION TECHNOLOGY
FOR AGRICULTURE, 2E

Larry Jeffus, Eastfield College (Emeritus)

© 2011, 580pp, Hardback, 9781435498570

ebook



METAL FABRICATION TECHNOLOGY FOR AGRICULTURE, 2E provides students with an easy-to-understand, safety-conscious introduction to agricultural welding processes and techniques. Each section of this full-color book begins by

introducing students to equipment and materials used in agricultural welding and includes complete setup instructions. The subsequent chapters in each section allow students to learn individual welding techniques in various applications and positions. METAL FABRICATION TECHNOLOGY FOR AGRICULTURE, 2E provides extensive coverage of brazing and specialized nonmetallic fabrication, designed to lead students step-by-step in developing the skills necessary for welding all types of agricultural machinery. Each chapter includes close up shots of actual welds and learning aids that have been proven to be effective, making this how-to and reference manual a key resource for students participating in agriculture education programs throughout the country.

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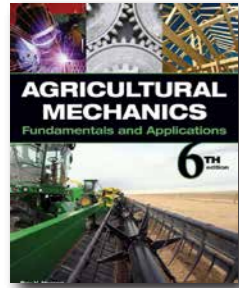
AGRICULTURAL MECHANICS, 6E

Fundamentals & Applications

Ray V. Herren, University of Georgia, Athens (Emeritus)

© 2010, 832pp, Hardback, 9781435400979

ebook



AGRICULTURAL MECHANICS: FUNDAMENTALS AND APPLICATIONS, 6th edition is designed to provide high school students with the latest concepts and applications in a wide variety of agricultural mechanics.

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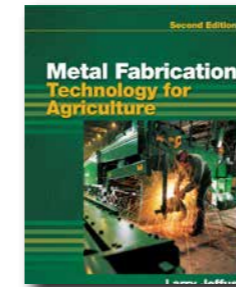
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METAL FABRICATION TECHNOLOGY FOR AGRICULTURE, 2E

Larry Jeffus, Eastfield College (Emeritus)

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ebook



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ANIMAL SCIENCE

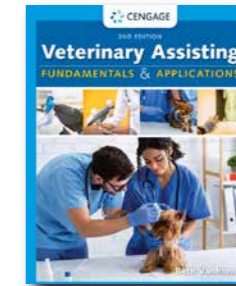
NEW EDITION

VETERINARY ASSISTING FUNDAMENTALS AND APPLICATIONS, 2E

Beth Vanhorn, AS, CVT, Dauphin County Technical School, Veterinary Assistant Program; Robert Clark, PhD, Administrative Director - Dauphin County Technical School

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Vanhorn's VETERINARY ASSISTING: FUNDAMENTALS AND APPLICATIONS, 2ND EDITION, equips you with the knowledge and skills you need for success in real-world practice. Offering step-by-step explanations, the text begins with the

basics of veterinary medical terminology and office procedures before advancing to more advanced skills, such as anatomy, restraint, nursing care, radiology and surgical assisting. Comprehensive coverage of animal production and management includes companion, large and exotic animals, while a separate section focuses on general anatomy and physiology of each body system -- along with related disease processes. Clinical scenarios vividly illustrate exactly how chapter concepts apply on the job. Also available, the MindTap digital solution propels you from memorization to mastery with its flexible anywhere, anytime learning tools.

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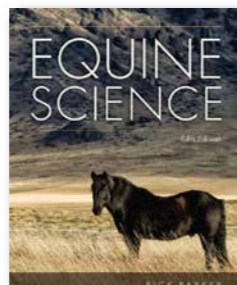
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EQUINE SCIENCE, 5E

R.O. (Rick) Parker, Ph.D., College of Southern Idaho

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This engaging, informative text provides a thorough introduction to equine care and management. EQUINE SCIENCE, Fifth Edition, features a full-color layout, numerous photos, and vivid illustrations that help bring chapter material to life, as well as a logical, easy-to-

understand sequence of topics. Following an introduction to the equine industry, you'll learn about horses' unique anatomy and needs; how to care for, train, and manage horses; and key business aspects of the industry. This all-new edition also clearly connects text content to National AFNR (Agriculture, Food, and Natural Resources) Standards, key math and science concepts, and current references, helping prepare you for success in the classroom and beyond.

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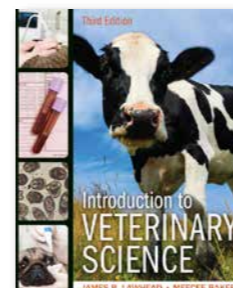
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INTRODUCTION TO VETERINARY SCIENCE, SOFT COVER, 3E

MeeCee Baker; MeeCee Baker

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ebook



INTRODUCTION TO VETERINARY SCIENCE, Third Edition, provides a solid foundation in this dynamic field for those studying animal and veterinary sciences or preparing for careers as veterinary assistants or technicians. The text begins

with an overview of cellular and tissue physiology, followed by chapters dedicated to individual body systems to enable easy comprehension. The authors then investigate crucial topics such as nutrition, disease, surgeries, cost analysis of procedures, safety, and professionalism. Throughout the text, real-life examples are integrated with chapter material to provide practical context, and both small and large animals are featured to expose students to the variety of cases they may encounter in the field. Each chapter opens with a "Day in the Life" preview that explores relevant applications of upcoming content, and chapters conclude with a description of clinical significance.

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Part I: COMPARATIVE ANATOMY AND PHYSIOLOGY. 1. Basic Cell Biology. 2. Tissue Types and Functions. 3. The Musculoskeletal System. 4. The Circulatory System. 5. The Respiratory System. 6. The Renal System. 7. The Digestive System. 8. The Reproductive System. 9. The Nervous System. 10. The Endocrine System. 11. The Immune System. Part II: NUTRITION. 12. Basic Nutrients. 13. Species Comparison. Part III: DISEASES. 14. Principles of Infectious Disease. 15. Disease Prevention. 16. Classification of Diseases. 17. Zoonoses. 18. Diagnosis of Disease. Part IV: SURGERY. 19. Principles of Surgery. Part V:

PROFESSIONALISM AND CAREERS. 20. Safety. 21. Careers and Decision Making in Veterinary Science. Glossary. Bibliography. Index.

THE SCIENCE OF ANIMAL AGRICULTURE, 5TH, 5E

Ray V. Herren, University of Georgia, Athens (Emeritus)

© 2019, 504pp, Hardback, 9781337390866

 CENGAGE | MINDTAP **ebook**



With up-to-date information, a highly visual presentation, and a reader-friendly writing style, this trusted text offers an ideal introduction to basic science concepts involved in the production of agricultural animals. THE SCIENCE OF ANIMAL AGRICULTURE, Fifth

Edition, explores key scientific principles while emphasizing their practical applications, clearly demonstrating the integral connections between science and agriculture. You'll learn about biological processes including reproduction, growth and development, and animal behavior, as well as production-related topics such as nutrition, disease, and the latest in animal biotechnology. The author also addresses key issues in today's agricultural industry, such as animal welfare, consumer concerns, and environmental considerations, providing further insights to prepare you for career success.

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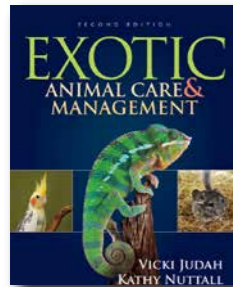
15. Animal Cells: The Building Blocks. 16. Animal Genetics. 17. The Scientific Selection of Agricultural Animals. 18. The Reproduction Process. 19. Cloning Animals. 20. Animal Growth and Development. 21. Animal Nutrition. 22. Meat Science. 23. Parasites of Agricultural Animals. 24. Animal Diseases. 25. The Issue of Animal Welfare. 26. Consumer Concerns. 27. Careers in Animal Science.

EXOTIC ANIMAL CARE AND MANAGEMENT, 2E

Vicki Judah; Kathy Nutall, Jordan Applied Technology Center

© 2017, 384pp, Paperback, 9781285425085

ebook



Focusing exclusively on the care of exotic species as pets, EXOTIC ANIMAL CARE AND MANAGEMENT, 2ND EDITION delves into the unique behaviors, diet, housing considerations, handling and restraint methods, medical concerns

and clinical procedures related to the proper management of these animals. Reader-friendly and concise, each chapter covers a specific exotic animal commonly found in veterinary practice, including small mammals, birds, reptiles, amphibians, intervtebrates, alpacas and llamas, miniature pigs and backyard chickens. Also included is an overview of specific concerns and zoonotic diseases associated with exotic animals so that you are fully prepared to contribute to their care and treatment.

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13. Sugar Gliders. UNIT III: 14. Avian. UNIT IV: 15. Reptiles. UNIT V: 16. Amphibians. UNIT VI: 17. Scorpions. 18. Tarantulas. 19. Hermit Crabs. UNIT VII: 20. Alpacas and Llamas. UNIT VIII: 21. Miniature Pigs. Glossary. Appendix. Index.

INTRODUCTION TO VETERINARY SCIENCE, 3E

James Lawhead; MeeCee Baker

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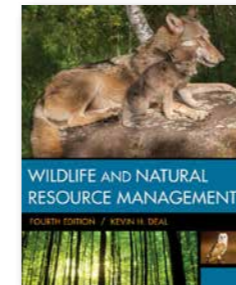
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WILDLIFE & NATURAL RESOURCE MANAGEMENT, 4E

Kevin H. Deal, Northwest High School

© 2017, 384pp, Hardback, 9781305627741

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Understand how professionals manage the natural world with WILDLIFE AND NATURAL RESOURCE MANAGEMENT, 4E! From running fisheries and national parks to studying the environment and resources conservation, career opportunities abound in this

growing field. In addition to professional perspectives, this all-new fourth edition encourages you to explore your wild side with vibrant, full-color photos and illustrations of animals, habitats, and endangered species, including ways to identify each. As our human population continues to grow, the pressure on natural resources will inevitably increase. In the past thirty years humans have come a long way in terms of managing fish and wildlife, conserving soil, and protecting the water supply, but it is up to future generations to continue that progress. WILDLIFE AND NATURAL RESOURCE MANAGEMENT, 4E shows you the path to that future—and builds a greater appreciation for the natural world and its limited resources.

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LAB MANUAL FOR FLANDERS' MODERN LIVESTOCK & POULTRY PRODUCTION, 9TH, 9E

Frank Flanders, University of Georgia; James R. Gillespie, Illinois State Board of Education, Springfield, Illinois

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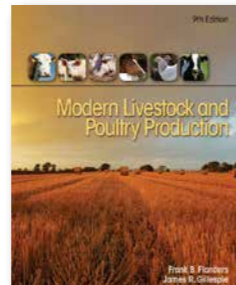
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Frank Flanders, University of Georgia; James R. Gillespie, Illinois State Board of Education, Springfield, Illinois

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Designed to prepare you for a career in the livestock industry, the Ninth Edition of MODERN LIVESTOCK AND POULTRY PRODUCTION has been revised to include the most up-to-date, comprehensive information in the field. With coverage of basic animal

science and livestock industry information as well as current issues in animal agriculture, this engaging text covers everything you need to know about all phases and types of livestock production. Through updated visual aids, real-world applications, and comprehensive study tools, the Ninth Edition gives you a solid understand of the anatomy, physiology, nutrition, feeding, and reproduction of multiple livestock and poultry breeds.

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SMALL ANIMAL CARE AND MANAGEMENT, 4E

Dean M. Warren, Columbia City High School (retired)

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ebook



Reader-friendly and engaging, SMALL ANIMAL CARE AND MANAGEMENT, Fourth Edition, offers a comprehensive guide to the care and husbandry of small animals. Through a logical flow of information, it introduces you to the basics

of the small animal industry, including the history, safety concerns and care and welfare of these animals before diving into the specifics of each, with chapters covering dogs, cats, reptiles, birds, fish and exotic species. Full-color photos and illustrations visually depict various breeds and their characteristics, anatomy, handling techniques, housing and other care concerns to facilitate learning, while activities and additional resources offer the opportunity for application and further study.

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WORKBOOK FOR WARREN'S SMALL ANIMAL CARE AND MANAGEMENT, 4TH, 4E

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The student workbook is designed to help you practice and retain key chapter content. Included within this resource are multiple –type questions to evaluate your knowledge of chapter concepts, links to online resources, case studies and additional

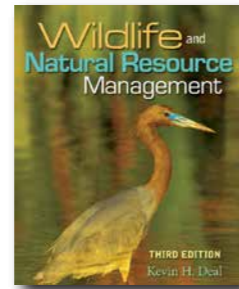
activities.

WILDLIFE AND NATURAL RESOURCE MANAGEMENT, 3E

Kevin H. Deal, Northwest High School

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ebook



Take an in-depth look at the very complex world of wildlife, fisheries, and natural resource management with this indispensable resource that is packed with valuable learning aids like end-of-chapter student activities, a glossary of key terms, and

appendices of additional information.

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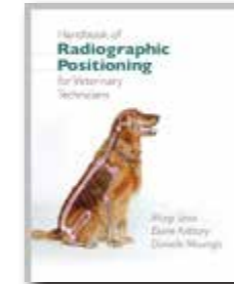
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HANDBOOK OF RADIOGRAPHIC POSITIONING FOR VETERINARY TECHNICIANS

Margi Sirois; Elaine Anthony

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The Handbook of Radiographic Positioning for Veterinary Technicians is specifically designed for use as an aid in learning radiographic positioning techniques and as a practical guide for everyday use in the small animal clinic. This concise

handbook presents a systematic approach to the positioning of canine, feline, and exotic animal patients for routine and special radiographic procedures. The primary focus is on providing visual aids of animals in position for radiographic procedures. The resulting radiograph produced is included for each radiographic position. A diagram of anatomical landmarks used in determining correct positioning is also included.

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Chapter 1: General Principles of Small Animal Radiographic Positioning. Chapter 2: Thoracic Radiographs. Chapter 3: Abdominal Radiographs. Chapter 4: Pelvic Radiographs. Chapter 5: Forelimb Radiographs. Chapter 6: Hindlimb Radiographs. Chapter 7: Skull Radiographs. Chapter 8: Dental Radiographs. Chapter 9: Spinal Radiographs. Chapter 10: Radiography of Avian and Exotic Animals.

RESTRAINT & HANDLING FOR VETERINARY TECHNICIANS & ASSISTANTS

Bonnie Ballard, DVM; Jody Rockett, DVM, College of Southern Idaho

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ebook



Restraint and Handling for Veterinary Technicians and Assistants provides the knowledge required to restrain animals in a way that is safe for both the patient and the restrainer. Written in a “how to” format Restraint and Handling for Veterinary Technicians and

Assistants details information required for proper restraint for both small and large animals, as well as exotics. To aid the reader, the text features a glossary of terms and practice questions at the end of each chapter, and illustrates the most common restraint techniques seen in veterinary practice.

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Unit 1: SMALL ANIMAL RESTRAINT. Chapter 1. Principles of Restraint in Veterinary Practice. Principles of Restraint. Animals in a Veterinary Facility. Complications of Restraint. Chapter 2. Restraint Tools and Techniques for Small Animals. The Use of Restraint Tools in Small Animal Practice. Noose Leashes. Rabies Pole. Blankets and Towels. Leather Gloves. Cat Bag. Dog Muzzles. Cat Muzzles. Cat Burrito Restraint. Chapter 3. Restraint of Dogs. Restraint of the Dog. Guidelines for Restraint of the Dog. Restraint of the Dog in the Standing Position. Restraint of the Dog in the Sitting Position. Restraint of the Dog in Sternal Recumbency. Restraint of a Dog's Head for Procedures Performed by Someone Else. Single Person Restraint of a Dog's Head When Performing a Procedure to the Head. Restraint of a Dog in Lateral Recumbency. Restraint of the Dog for Cephalic Venipuncture. Restraint for Venipuncture of the Lateral Saphenous vein. Restraint for Jugular Venipuncture. Chapter 4. Restraint of Cats.

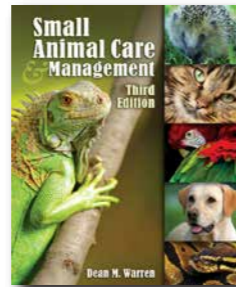
Restraint of the Cat. Restraint of the Cat Using the One-Hand Hold. Restraint of the Cat in Sternal Recumbency. Restraint of the Cat in the Standing Position. Procedure for Restraint of a Cat's Head. "Cat Stretch" Restraint (Restraint of the Cat in Lateral Recumbency). Restraint of the Cat for Medial Saphenous Vein Venipuncture. Restraint of the Cat for Cephalic Venipuncture. Restraint of the Cat for Jugular Venipuncture. Removing a Cat from a Cage. Placing a Cat in a Cage. Chapter 5. Restraint of Exotic Pets. Restraint of Exotics. Restraint of the Ferret. Restraint of the Rabbit. Restraint of the Pet Bird. Restraint of the Guinea Pig. Unit 2: LARGE ANIMAL RESTRAINT. Chapter 6. Ropes and Knots. Ropes. Finishing the End of a Rope. Quick-Release Knot. Bowline. Tomfool Knot. Double Half Hitch Knot. Tail Tie. Braiding an Eye Splice. Rope Halters. Chapter 7. Restraint of the Horse. Restraint of the Horse. Guidelines for Restraint of the Horse. Horse Behavior. Rules of Tying. Stock. Haltering and Leading. Applying Chains. Twitches. Loading Horses in Trailers. Special Handling Scenarios. Chapter 8. Restraint of Cattle. Restraint of Cattle. Guidelines for Restraint of Cattle. Processing Facilities. Operating Chutes. Haltering. Tailing-Up Cattle. Casting Cattle. Flanking. Securing Cattle Feet for Examination. Hot Shot. Nose Tongs. Nose Rings. Chapter 9. Restraint of the Goat. Restraint of the Goat. Guidelines for Restraint of the Goat. Collaring and Leading Goats. Stanchion. Chapter 10. Restraint of the Pig. Restraint of Pigs. Guidelines for Restraint of the Pig. Pig Boards. Castration Restraint. Snout Snare. Chapter 11. Restraint of the Llama. Restraint of the Llama. Guidelines for Restraint of the Llama. Haltering and Leading. Stock. Glossary. Index.

SMALL ANIMAL CARE AND MANAGEMENT, 3E

Dean M. Warren, *Columbia City High School (retired)*

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ebook



Small Animal Care and Management, 3rd Edition is a highly researched text that covers numerous species, detailed by scientific names, as well as the history and the domestication of animals including information on safety, nutrition, and careers

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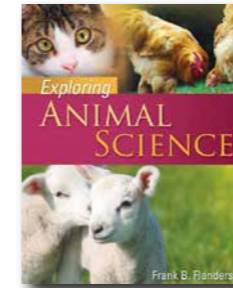
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EXPLORING ANIMAL SCIENCE

Frank Flanders, *University of Georgia*

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EXPLORING ANIMAL SCIENCE offers educators the perfect tool for teaching animal agriculture: one that balances the academic background critical to building a strong foundation in fundamental science with the practical, production-oriented content vital to

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Animal Science Biology and Technology, 3rd edition is a book designed for students studying animal science and will take readers from the basics of production through to evaluation, while delivering a contemporary industry overview.

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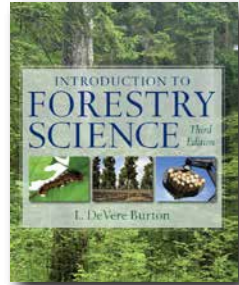
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ENVIRONMENTAL SCIENCE

INTRODUCTION TO FORESTRY SCIENCE, SOFT COVER, 3E

L. Devere Burton, Ph.D. from Iowa State University

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Practical, easy to understand, and up-to-date, **INTRODUCTION TO FORESTRY SCIENCE, Third Edition** provides readers with a comprehensive overview of the principles and practices of forest management that are commonly practiced in

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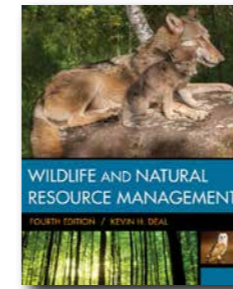
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WILDLIFE & NATURAL RESOURCE MANAGEMENT, 4E

Kevin H. Deal, Northwest High School

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Understand how professionals manage the natural world with **WILDLIFE AND NATURAL RESOURCE MANAGEMENT, 4E!** From running fisheries and national parks to studying the environment and resources conservation,

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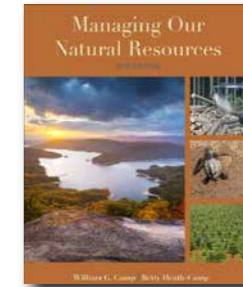
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MANAGING OUR NATURAL RESOURCES, 6E

William G. Camp, Virginia Polytechnic Institute and State University -- Blacksburg, Virginia; Betty Heath-Camp, Virginia Polytechnic Institute and State University

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Explore the world's natural resources and the ways professionals manage them with **MANAGING OUR NATURAL RESOURCES, 6th Edition!** Written for introductory agriculture courses, this book examines a broad variety of topics from forest fires and fishery

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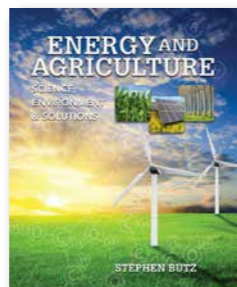
ENERGY AND AGRICULTURE

Science, Environment, and Solutions

Stephen Butz

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As worldwide demand for energy continues to rise and conventional non-renewable resources continue to dwindle in supply, the need for new, environmentally conscious ways to meet society's energy requirements are becoming increasingly important. ENERGY AND AGRICULTURE is designed to introduce you to the role that agriculture can play in helping to satisfy the world's energy demands. The use of agriculturally based fuel systems, also known as biofuels, as a means to supply energy to our technological society, provides environmentally safe, renewable energy options for all aspects of life, including industry, transportation, and electrical power generation. By providing a solid foundation in the energy and resources used historically combined with a look at future options toward more sustainable resources ENERGY AND AGRICULTURE provides a solid understanding of one of the most important issues of the twenty-first century.

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ENERGY AND AGRICULTURE LAB MANUAL

Stephen Butz

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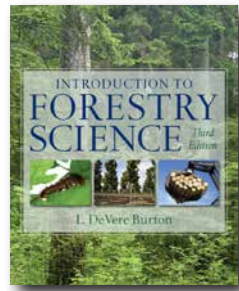
The Laboratory Manual is a valuable tool designed to enhance your lab experience. Lab activities, objectives, materials lists, step-by-step procedures, illustrations, and review questions are commonly found in a Lab Manual.

INTRODUCTION TO FORESTRY SCIENCE, 3E

L. Devere Burton, Ph.D. from Iowa State University

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ebook



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States. Appropriate for anyone interested in forestry or natural resources, this book is filled with visual aids and tools designed to make studying easier such as terms to know, objectives, forest profiles, profiles on forest safety, looking back, questions for discussion and review, and learning activities. In addition, career profiles give you an overview of what it might be like to work in the forestry industry and demonstrate how concepts are applied in the real world. Coverage includes topics such as the biological processes involved in tree growth, the economic impact of forests on the U.S. economy, forest management and safety, and laws and regulations that govern the use of forests.

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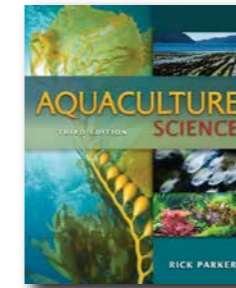
Forestry 15. Space-Age Forest Technologies Section VI DENDROLOGY: THE SCIENTIFIC STUDY OF TREES 16. Physiology of Trees 17. Forest Ecology 18. Diseases and Pests of Trees 19. Anatomy and Classification of Trees Section VII TREES OF THE FOREST 20. Tree Identification APPENDICES. Appendix I. North American Trees and Bushes. Appendix II. Insects of Forests and Ornamental Trees. Appendix III. Schools Offering Forestry/Natural Resource Programs. Appendix IV. Timberland Ownership by State Appendix V. United States Land Areas. Appendix VI. The Tree Farm Community Appendix VII. Harvested Volume in the United States by Ownership and Region GLOSSARY. INDEX.

AQUACULTURE SCIENCE, 3E

Rick Parker, Ph.D., College of Southern Idaho, Twin Falls

© 2012, 672pp, Hardback, 9781435488120

ebook



This comprehensive book introduces you to the aquaculture industry. Every aspect of this growing field is covered, from history of aquaculture, descriptions of aquatic plants and animals and feeding to in-depth coverage of economics, marketing, management

and diseases of aquatic animals and plants. **AQUACULTURE SCIENCE**, third edition, addresses latest production methods, species types, advances in technology, trends and statistics. The science of aquaculture, chemistry, biology, and anatomy and physiology, is stressed throughout to ensure that you understand the fundamental principles. A complete chapter offers detailed information on career opportunities in the aquaculture industry.

CONTENTS

1. Aquaculture Basics and History. Introduction and Definitions. Historical Patterns and Practices. Aquaculture Activities. The Future of Aquaculture. 2. Aquatic Animals. US Aquatic Animal Species. Common Characteristics of Aquatic Species. Structure and Functions of Aquatic Animals. 3. Marketing Aquaculture. International Production. Consumption. Marketing Basics. Processing. Inspection. 4. Management Practices for Finfish. Spawning. Sex Determination. Finfish. Controls. Genetics. 5. Recreational Fishing Industry. Brief History of Recreational Fishing. Methods of Fishing. Types of Fish. Impact of Recreational Fishing. U.S. Fish & Wildlife Service. Pacific Salmon. 6. Raising Ornamental Fish. Sources of species. Specific Ornamental Fish. Florida Tropical Ornamental Fish Culture. 7. Management Practices for Crustaceans and Mollusks. Culture Status. Other Commercial Species. 8. Management Practices for Alligators, Frogs and Plants. Alligators. Frogs. Aquatic Plants.

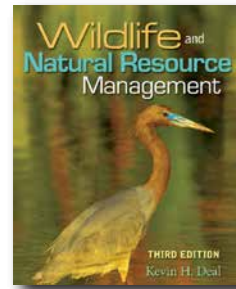
9. Fundamentals of Nutrition in Aquaculture. Nutrition of Fish. 10. Feeds and Feeding. Diet Formulation and Processing. Feeding Aquatic Animals. Other Warmwater Fish. Time of First Feeding. Feed Calculations. Aquatic Plants. 11. Health of Aquatic Animals. Health Management. Stress and Disease. Disease Resistance. Disease Types. Parasitic Diseases. Fungus. Bacterial Diseases. Viral Diseases. Noninfectious Diseases. Determining the Presence of Disease. Disease Treatment. Calculating Treatments. Immunization. 12. Water Requirements for Aquaculture. Water Qualities, Measurements, and Alterations. Other Factors. Obtaining Water. Managing Water. Calculating Treatments. Disposing of Water. 13. Aquatic Structures and Equipment. Ponds. Construction of Levee-Type Ponds. Raceways and Tanks. Cages and Pens. Other Major Equipment. 14. Aquariums. Background. Fish for the Aquarium. Choosing and Establishing an Aquarium. Managing the Aquarium. Water Quality. Aquarium Checklist. 15. Recirculating Systems. Background. System Design. System Management. 16. Sustainable Aquaculture and Aquaponics. Attempts to Define Sustainable. Standards of Sustainable Aquaculture. Aquaponics. Sustainable Standards Score Card. 17. Aquaculture Business. Counting the Cost. Managing the Business. Planning-The Secret of Business Success. Setting Goals for Business Management Decisions. Business and Risky Decisions. Business Structures. Records Improve Profitability. Using an Accounting System for Analysis. Computers and Management. Decisions. Obtaining Credit. Human Resources. Business Managers of Tomorrow. 18. Career Opportunities in Aquaculture. General Skills and Knowledge. Intangible Skills. Entrepreneurship. Jobs in Aquaculture. Aquaculture Industry Supervised Agricultural Experience. Education and Experience. Identifying a Job. Getting a Job. Appendix. Glossary. Index.

WILDLIFE AND NATURAL RESOURCE MANAGEMENT, 3E

Kevin H. Deal, Northwest High School

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Take an in-depth look at the very complex world of wildlife, fisheries, and natural resource management with this indispensable resource that is packed with valuable learning aids like end-of-chapter student activities, a glossary of key terms, and

appendices of additional information.

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SECTION 1 – INTRODUCTION 1 – The Importance of Natural Resources. 2 – Conservation: Wise Use of Natural Resources. 3 – The History of Wildlife Management in America. 4 – The Administration of Wildlife Management. 5 – Habitat Requirements of Wildlife. 6 – The Human Impact on Wildlife Habitat. 7 – Wildlife and American Sport Hunting. 8 – Modern Wildlife Management. 9 – Modern Waterfowl Management. 10 – Endangered Species. 11 – Wildlife Parks and Zoos. SECTION 2 – WILDLIFE AND FISH IDENTIFICATION 12 – Large Mammals. 13 – Small Mammals. 14 – Nonindigenous Species. 15 – Upland Game Birds. 16 – Ducks, Geese, Swans and Cranes. 17 – Songbirds and other Common Birds. 18 – Avian Predators. 19 – Common Shorebirds, Herons and Egrets. 20 – Reptiles. 21 – Amphibians. 22 – Freshwater Habitats and Their Management. 23 – Freshwater Fishes. SECTION 3 – CAREERS 24 – Careers in Wildlife and Fisheries Management.

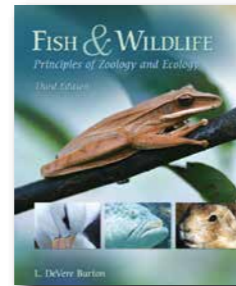
FISH & WILDLIFE, 3E

Principles of Zoology and Ecology

L. DeVere Burton, Idaho State University

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FISH & WILDLIFE, PRINCIPLES OF ZOOLOGY AND ECOLOGY, 3rd Edition, provides a broad-spectrum overview, for high school students, of the wild animals of North America and the environments they live in, including basic principles of

science as they apply to wild animals and the habitats they occupy. Fish & Wildlife, Principles of Zoology and Ecology, 3rd Edition, contents includes chapters that detail zoology and ecology basics; zoology and ecology of mammals, birds, fishes, reptiles, and amphibians; and conservation and management of wildlife resources.

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1. Principles of Zoology. Classification of Animals. Animal Behaviors and Habits. Animal Structure or Anatomy. Animal Nutrition and Digestion. Animal Growth. Animal Reproduction. 2. Principles of Ecology. Conservation of Matter. Laws of Energy. The First Law of Energy. The Second Law of Energy. Natural Cycles. The Carbon Cycle. The Nitrogen Cycle. The Water Cycle. Food Chains. 3. Understanding Relationships Between Wildlife and Agriculture. Fundamentals of Ecology. Agricultural Impacts on Ecosystems. Biological Succession. 4. Biomes of North America. Freshwater Biome. Marine Biome. Terrestrial Biome. Desert Biome. Tundra Biome. Grassland Biome. Temperate Forest Biome. Coniferous Forest Biome. 5. Our Wildlife Resources. A National Treasure. The U.S. Endangered Species Act. Controversy and Protectionism. Extinction and its Causes. Managing Endangered and Threatened Species. 6. Gnawing Mammals. Mice, Rats, Voles, and Lemmings. Squirrels. Marmots and Prairie Dogs. Rabbits, Hares, and Pikas.

Porcupines. Gophers and Beavers. 7. Hoofed Mammals. Pronghorn. Deer. Bison and Musk Ox. Wild Sheep. Mountain Goats. Peccary. Horses and Burros. 8. Predatory Mammals. Wild Cats. Wild Dogs. Bears. Weasels. Raccoons. 9. Marine Mammals. Seals. Eared Seals. True Seals. Walrus. Manatees. Whales. Baleen Whales. Toothed Whales. 10. Unusual Mammals. Opossums. Shrews and Moles. Bats. Armadillo. 11. Waterfowl. Ducks. Geese. Swans. 12. Game Birds. Quails. Partridges. Pheasants. Grouse. Turkeys. Pigeons and Doves. 13. Birds of Prey. Hawk-like Birds. Eagles, Hawks, and Kites. Falcons. Vultures. Osprey. Owls. Typical Owls. Barn Owls. 14. Songbirds and Other Perching Birds. Songbirds. Crows and Jays. Cuckoos. Kingfishers. Hummingbirds. 15. Other Birds of North America. Long-legged Wading Birds. Gull-like Birds. Upright Perching Waterbirds. Duck-like Birds. Sandpiper-like Birds. Chicken-like Marsh Birds. Upland Ground Birds. Swallows and Swifts. Tree-Clinging Birds. 16. Freshwater Fishes. Catfishes. Sunfishes. Perch. Trout, Char and Whitefishes. Pike. Sturgeons. Minnows and Suckers. 17. Anadromous and Diadromous Fishes. Salmon. Steelhead. Striped Bass. Shad. Freshwater Eels. 18. Saltwater Fishes and Fauna. Sharks, Skates, and Rays. Mackerel, Tuna, and Marlins. Flounder, Halibut, and Sole. Herring. Codfishes. Smelts. Sea Bass and Groupers. Mollusks. Crustaceans. 19. Reptiles and Amphibians. Reptiles. Alligators and Crocodiles. Lizards. Snakes. Turtles and Tortoises. Amphibians. Frogs and Toads. Salamanders and Newts. 20. Responsible Management of Wildlife Resources. Role of Private Institutions. Farmers and Ranchers. Industry. Private Citizens. Game Farms and Preserves. Role of Special Interest Groups. Environmental Organizations. Recreational Interests. Role of Government. Government Agencies. National Parks and Monuments. National and International Law. Multiple Use Concept of Management. Wildlife Careers. Education. Supervised Experience. Employer Expectations. Occupational Safety. 21. Conservation of Natural Resources. Conserving the Soil. Maintaining a Pure Water Supply. Preserving Air Quality. Preserving and Restoring Wildlife Populations and Habitats. Reclaiming Damaged or Polluted Resources. 22.

The Human Connection to Wildlife and Natural Resources. Foundation for Agriculture. Source of Materials for Medicines. Mechanism for Natural Cycles. Recreation. Intrinsic Value. Hunting and Fishing for Sport. Game Laws and Regulations. Using Campgrounds, Trails, Roads, and Waterways. Basis for Commerce. Safety Education. The Principle of Stewardship. Ethics, Privileges and Responsibilities. Wildlife Management. Outdoor Recreation Management. Glossary. Index.

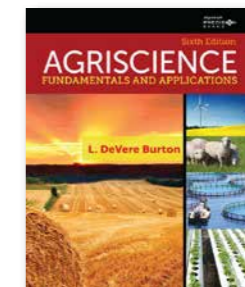
GENERAL AGRICULTURE

AGRISCIENCE FUNDAMENTALS AND APPLICATIONS UPDATED, PRECISION EXAMS EDITION, 6E

L. DeVere Burton, Idaho State University

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In addition to providing a comprehensive overview of the agricultural industry and industry-based sciences, the Precision Exams Edition of Burton's AGRISCIENCE: FUNDAMENTALS AND APPLICATIONS, Sixth Edition, aligns to Precision Exams' Agricultural Science

exam. The text covers essential topics such as agriscience in the information age, natural resources, integrated pest management, plant science, animal science, food science, and communication and management, giving students with a solid foundation in the basic principles and practices of agriscience. The Precision Exams Edition also features new information related to the National FFA Organization and selecting and planning an SAE; how math, science, and social studies relate to agriscience; current technologies used in the industry; career opportunities; and advice for professional success and business ownership.

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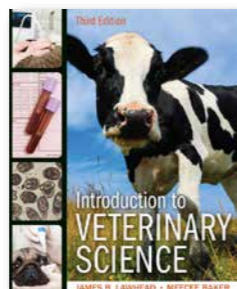
Part 1: AGRISCIENCE IN THE INFORMATION AGE. 1. The Science of Living Things. 2. Better Living through Agriscience. 3. Biotechnology. Part II: YOU AND THE NEW MILLENNIUM. 4. Career Options in Agriscience. 5. Supervised Agricultural Experience. 6. Leadership Development in Agriscience. Part III: NATURAL RESOURCES MANAGEMENT. 7. Maintaining Air Quality. 8. Water and Soil Conservation. 9. Soils and Hydroponics Management. 10. Forest Management. 11. Wildlife Management. 12. Aquaculture. Part IV: INTEGRATED PEST MANAGEMENT. 13. Biological, Cultural, and Chemical Control of Pests. 14. Safe Use of Pesticides. Part V: PLANT SCIENCES. 15. Plant Structures and Taxonomy. 16. Plant Physiology. 17. Plant Reproduction. Part VI: CROP SCIENCE. 18. Home Gardening. 19. Vegetable Production. 20. Fruit and Nut Production. 21. Grain, Oil, and Specialty Field-Crop Production. 22. Forage and Pasture Management. Part VII: ORNAMENTAL USE OF PLANTS. 23. Indoor Plants. 24. Turfgrass Use and Management. 25. Trees and Shrubs. VIII: ANIMAL SCIENCES. 26. Animal Anatomy, Physiology, and Nutrition. 27. Animal Health. 28. Genetics, Breeding, and Reproduction. 29. Small Animal Care and Management. 30. Dairy and Livestock Management. 31. Horse Management. Part IX: FOOD SCIENCE AND TECHNOLOGY. 32. The Food Industry. 33. Food Science. Part X: COMMUNICATIONS AND MANAGEMENT IN AGRISCIENCE. 34. Marketing in Agriscience. 35. Agribusiness Planning. 36. Entrepreneurship in Agriscience. Glossary. Appendix A: Developing a Personal Budget. Appendix B: Plan Supervised Agricultural Experience Programs. Index.

INTRODUCTION TO VETERINARY SCIENCE, SOFT COVER, 3E

MeeCee Baker; MeeCee Baker

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INTRODUCTION TO VETERINARY SCIENCE, Third Edition, provides a solid foundation in this dynamic field for those studying animal and veterinary sciences or preparing for careers as veterinary assistants or technicians. The text begins

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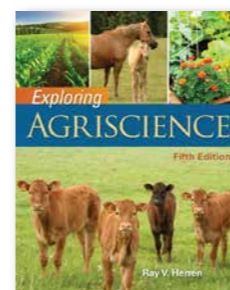
PROFESSIONALISM AND CAREERS. 20. Safety. 21. Careers and Decision Making in Veterinary Science. Glossary. Bibliography. Index.

EXPLORING AGRISCIENCE, 5E

Dr. Ray V. Herren, University of Georgia, Athens (Emeritus)

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Discover the exciting world of agriculture through EXPLORING AGRISCIENCE, Fifth Edition, the resource that continues to inspire and inform middle school students across the nation. The new, updated Fifth Edition of this respected

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15. The Dairy Industry. 16. The Poultry Industry. 17. The Science of Aquaculture. 18. Urban Agriculture. 19. Companion Animals. 20. Preserving our Food Supply. 21. The Ethical Treatment of Animals. 22. Selecting and Using Hand Tools. 23. Small Engine Operation. 24. Biofuels. 25. Biotechnology: The Future of Agriculture. 26. High School Agricultural Education Programs. 27. Careers in Agricultural Science. English Glossary & Spanish Glosario.

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application experiences in the lab environment.

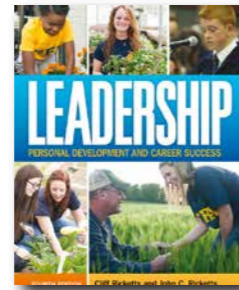
LEADERSHIP, 4E

Personal Development and Career Success

Cliff Ricketts, Middle Tennessee State University, Murfreesboro, Tennessee; John C. Ricketts, Tennessee State University

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If your goals include a successful career in agriculture--and a leadership role in tomorrow's food, fiber, or natural resources fields--this is the ideal resource for you. LEADERSHIP: PERSONAL DEVELOPMENT AND CAREER SUCCESS,

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Part I: UNDERSTANDING LEADERSHIP. 1. Leadership Categories and Styles. 2. Personality Types and Their Relationship to Leadership and Human Behavior. 3. Learning Styles and Leadership. 4. Developing Leaders. 5. Leading Teams and Groups. Part II: COMMUNICATION AND SPEAKING TO GROUPS. 6. Communication Skills. 7. Reciting (FFA Creed). 8. Prepared Speaking (FFA Public Speaking). 9. FFA Extemporaneous Public Speaking. Part III: LEADING INDIVIDUALS AND

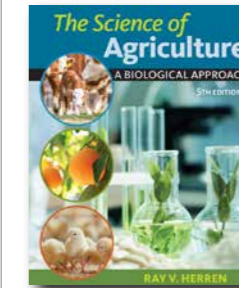
GROUPS. 10. Basic Parliamentary Procedure. 11. Advanced Parliamentary Procedure. 12. Conducting Successful Meetings. Part IV: MANAGERIAL LEADERSHIP SKILLS. 13. Problem Solving and Decision Making. 14. Goal Setting. 15. Time Management. 16. Motivating Others. 17. Conflict Resolution. Part V: PERSONAL DEVELOPMENT. 18. Self-Concept. 19. Attitudes. 20. Ethics in the Workplace. Part VI: TRANSITION TO WORK SKILLS. 21. Selecting a Career and Finding a Job. 22. Getting the Job: Resumes, Applications, and Interviews. 23. Employability Skills: Keeping the Job. Appendix A: The "Shotgun Approach": Implementation of Key Principles of Learning. Appendix B: Parliamentary Procedure Career Development Event. Appendix C: Jobs in Agriculture. Appendix D: National FFA Employment Skills Career and Leadership Development Event. Appendix E: Supervised Agricultural Experience and Leadership.

THE SCIENCE OF AGRICULTURE, 5E A Biological Approach

Ray V. Herren, University of Georgia, Athens (Emeritus)

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THE SCIENCE OF AGRICULTURE: A BIOLOGICAL APPROACH, Fifth Edition, masterfully introduces the biological sciences and explores the influences of these sciences on modern agricultural practices and the agricultural industry. Reader-friendly and

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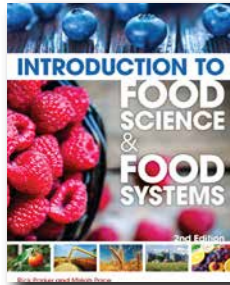
1. The Science of Agriculture. 2. Soil: The Source of Life. 3. Cells: Agriculture's Building Blocks. 4. The Science of Genetics. 5. Genetic Engineering. 6. The Classification of Agricultural Organisms. 7. Plant Systems. 8. Plant Reproduction. 9. Plant Growth. 10. Animal Systems. 11. Animal Reproduction. 12. Animal Growth. 13. Plant and Animal Diseases. 14. Weed Science. 15. Agricultural Entomology. 16. The Science of Forestry. 17. The Science of Aquaculture. 18. Agriculture and the Environment. 19. Wildlife Management. 20. A Safe Food Supply. 21. The Science of Food Preservation. 22. The Science of Fiber Production. 23. Producing Organically Grown Products. 24. New Directions in Agriculture. 25. Energy from Agriculture. 26. Careers in Agricultural Science. 27. The Agriscience Fair. 28. Laboratory Safety. Glossary/Glosario. Index.

INTRODUCTION TO FOOD SCIENCE AND FOOD SYSTEMS, 2E

Rick Parker, Ph.D., College of Southern Idaho, Twin Falls;
Miriah Pace, National Agricultural Institute

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INTRODUCTION TO FOOD SCIENCE AND FOOD SYSTEMS, 2nd Edition explores the foundations of the food industry, from nutrition and chemistry to processing and safety, and delves into some of the most pressing foodborne issues of our day. As the

world grapples with critical issues such as hunger and GMOs, opportunities abound in agriculture and food science careers, and INTRODUCTION TO FOOD SCIENCE AND FOOD SYSTEMS, 2nd Edition gives you the knowledge and skills required for success. Laced with full-color images, drawings, charts, and graphs, chapters deliver the latest information on genetically engineered foods, environmental concerns and sustainability, food needs of the world, the impacts of food on health, and more. INTRODUCTION TO FOOD SCIENCE AND FOOD SYSTEMS, 2nd Edition also tests your understanding of concepts with practical, hands-on activities in math, science and other key areas. Written with your future in mind, readings also correlate with National Agricultural Education Standards and FFA Career Development Events (CDEs) to prepare you for a meaningful career in today's agriscience industry.

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Radiant and Electrical Energy. 13. Fermentation, Microorganisms, and Biotechnology. 14. Food Chemistry. 15. Packaging. Section 3: FOODS AND FOOD PRODUCTS. 16. Milk. 17. Meat. 18. Poultry and Eggs. 19. Fish and Shellfish. 20. Cereal Grains, Legumes, and Oilseeds. 21. Fruits and Vegetables. 22. Fats and Oils. 23. Candies and Confectionary. 24. Beverages. Section 4: RELATED ISSUES. 25. Environmental Concerns and Processing. 26. Food Safety. 27. Regulations and Labeling. 28. World Food Needs. 29. Food and Health. 30. Careers in Food Science. Appendix A: Chemistry Review. Appendix B: Reference Tables. Appendix C: Harvesting and Storing Fruits, Nuts, and Vegetables. Glossary.

INTRODUCTION TO VETERINARY SCIENCE, 3E

James Lawhead; MeeCee Baker

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INTRODUCTION TO VETERINARY SCIENCE, Third Edition, provides a solid foundation in this dynamic field for those studying animal and veterinary sciences or preparing for careers as veterinary assistants or technicians. The text begins

with an overview of cellular and tissue physiology, followed by chapters dedicated to individual body systems to enable easy comprehension. The authors then investigate crucial topics such as nutrition, disease, surgeries, cost analysis of procedures, safety, and professionalism. Throughout the text, real-life examples are integrated with chapter material to provide practical context, and both small and large animals are featured to expose students to the variety of cases they may encounter in the field. Each chapter opens with a "Day in the Life" preview that explores relevant applications of upcoming content, and chapters conclude with a description of clinical significance.

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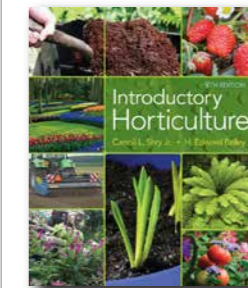
PROFESSIONALISM AND CAREERS. 20. Safety. 21. Careers and Decision Making in Veterinary Science. Glossary. Bibliography. Index.

INTRODUCTORY HORTICULTURE, 9E

Carroll Shry, Brandywine Landscaping; H. Edward Reiley

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Providing the most up-to-date coverage of basic principles and methods of practical application, INTRODUCTORY HORTICULTURE, 9e, offers many avenues to explore the horticulture field and remain on the cutting-edge of the industry.

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LAB MANUAL FOR SHRY/REILEY'S INTRODUCTORY HORTICULTURE, 9TH, 9E

Carroll Shry, Brandywine Landscaping; H. Edward Reiley

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Featuring new exercises related to tomato grafting, designing gardens, the safe operation of power equipment, and utilizing apps as horticultural tools, the NINTH EDITION of the LAB MANUAL TO ACCOMPANY INTRODUCTORY

HORTICULTURE contains a variety of hands-on activities to help you retain and apply key concepts and information presented in the text.

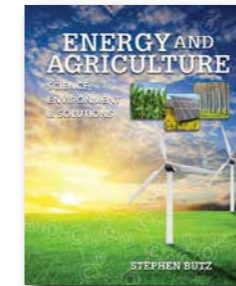
ENERGY AND AGRICULTURE

Science, Environment, and Solutions

Stephen Butz

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As worldwide demand for energy continues to rise and conventional non-renewable resources continue to dwindle in supply, the need for new, environmentally conscious ways to meet society's energy requirements are becoming increasingly important. ENERGY AND AGRICULTURE is designed to introduce you to the role that agriculture can play in helping to satisfy the world's energy demands. The use of agriculturally based fuel systems, also known as biofuels, as a means to supply energy to our technological society, provides environmentally safe, renewable energy options for all aspects of life, including industry, transportation, and electrical power generation. By providing a solid foundation in the energy and resources used historically combined with a look at future options toward more sustainable resources ENERGY AND AGRICULTURE provides a solid understanding of one of the most important issues of the twenty-first century.

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Systems. UNIT V: SOLID BIOENERGY FUELS FROM AGRICULTURE. 18. Solid Fuel Biomass Energy Resources. 19. Solid Biofuel Energy Production. 20. Environmental Impacts of Solid Biomass Fuels. UNIT VI: LIQUID BIOENERGY FUELS FROM AGRICULTURE. 21. Alcohol Transportation Fuels. 22. Biodiesel. 23. Biomass to Liquids. UNIT VII: GASEOUS BIOENERGY FUELS FROM AGRICULTURE. 24. Biogas. Glossary.

ENERGY AND AGRICULTURE LAB MANUAL

Stephen Butz

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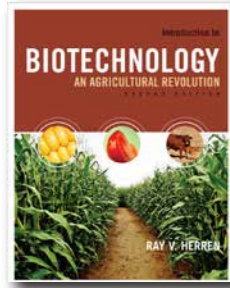
The Laboratory Manual is a valuable tool designed to enhance your lab experience. Lab activities, objectives, materials lists, step-by-step procedures, illustrations, and review questions are commonly found in a Lab Manual.

INTRODUCTION TO BIOTECHNOLOGY, 2E

Ray V. Herren, University of Georgia, Athens (Emeritus)

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ebook



INTRODUCTION TO BIOTECHNOLOGY: AN AGRICULTURAL REVOLUTION offers a thorough introduction to biotechnology and the ways it has revolutionized modern agriculture. This newly updated text provides a solid grounding in core biotechnology

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LAB MANUAL FOR HERREN'S INTRODUCTION TO BIOTECHNOLOGY, 2ND, 2E

Ray V. Herren, University of Georgia, Athens (Emeritus)

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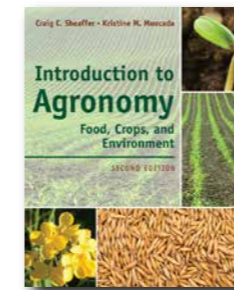
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INTRODUCTION TO AGRONOMY, 2E Food, Crops, and Environment

Craig C. Sheaffer, University of Minnesota; Kristine M. Moncada, University of Minnesota

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ebook



This full-color introduction to agronomy and crop science offers both traditional agricultural students and students with non agricultural backgrounds a timely look at the principles of crop science, sustainable agriculture, and a host of

related societal issues. A must-read text for anyone interested in what are arguably the most profoundly important issues of our time, INTRODUCTION TO AGRONOMY, second edition addresses the basics of safe and sustainable food and fiber production as well as big picture topics such as energy, ecology, and environmental quality. Throughout the text, readers will find information and illustrations on the latest agricultural methods, regulations, and practices--and how each is impacting our society and each individual within it.

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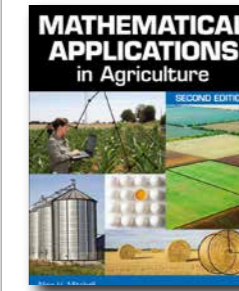
1. History of Agriculture. 2. Agriculture Today. 3. Feeding the World. 4. Classifying and Naming Crops. 5. Food and Energy from Plants. 6. Chemistry of Food and Plants. 7. Plant Anatomy and Morphology. 8. Plant Physiology and Growth. 9. Improving Plants. 10. Environment. 11. Agroecosystems. 12. Soils. 13. Cropping Systems. 14. Tillage and Crop Establishment. 15. Weeds. 16. Plant Disease and Insects. 17. Harvesting. 18. Organic Agriculture. 19. Crop Profiles: Grasses. 20. Crop Profiles: Legumes. 21. Crop Profiles: Other Crops. Appendix I: Scientific and Common Names. Appendix II: Metric Conversion Chart. Appendix III: Bushel Weights. Glossary. Index.

MATHEMATICAL APPLICATIONS IN AGRICULTURE, 2E

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Get the specialized math skills you need to be successful in today's farming industry with MATHEMATICAL APPLICATIONS IN AGRICULTURE, 2nd Edition. Invaluable in any area of agriculture--from livestock and dairy

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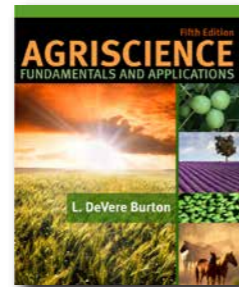
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AGRISCIENCE FUNDAMENTALS AND APPLICATIONS, 5E

L. DeVere Burton, Idaho State University

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Agriscience Fundamentals and Applications, 5th edition is an introductory applied science textbook intended for use in high school agriculture programs.

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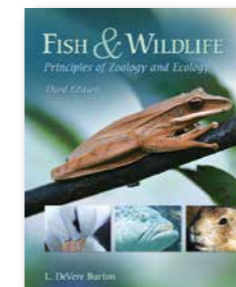
FISH & WILDLIFE, 3E

Principles of Zoology and Ecology

L. DeVere Burton, Idaho State University

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Fish & Wildlife, Principles of Zoology and Ecology, 3rd Edition, provides a broad-spectrum overview, for high school students, of the wild animals of North America and the environments they live in, including basic principles of science as they apply to wild animals and the habitats they occupy. Fish & Wildlife, Principles of Zoology and Ecology, 3rd Edition, contents includes chapters that detail zoology and ecology basics; zoology and ecology of mammals, birds, fishes, reptiles, and amphibians; and conservation and management of wildlife resources.

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1. Principles of Zoology. Classification of Animals. Animal Behaviors and Habits. Animal Structure or Anatomy. Animal Nutrition and Digestion. Animal Growth. Animal Reproduction. 2. Principles of Ecology. Conservation of Matter. Laws of Energy. The First Law of Energy. The Second Law of Energy. Natural Cycles. The Carbon Cycle. The Nitrogen Cycle. The Water Cycle. Food Chains. 3. Understanding Relationships Between Wildlife and

Agriculture. Fundamentals of Ecology. Agricultural Impacts on Ecosystems. Biological Succession. 4. Biomes of North America. Freshwater Biome. Marine Biome. Terrestrial Biome. Desert Biome. Tundra Biome. Grassland Biome. Temperate Forest Biome. Coniferous Forest Biome. 5. Our Wildlife Resources. A National Treasure. The U.S. Endangered Species Act. Controversy and Protectionism. Extinction and its Causes. Managing Endangered and Threatened Species. 6. Gnawing Mammals. Mice, Rats, Voles, and Lemmings. Squirrels. Marmots and Prairie Dogs. Rabbits, Hares, and Pikas. Porcupines. Gophers and Beavers. 7. Hoofed Mammals. Pronghorn. Deer. Bison and Musk Ox. Wild Sheep. Mountain Goats. Peccary. Horses and Burros. 8. Predatory Mammals. Wild Cats. Wild Dogs. Bears. Weasels. Raccoons. 9. Marine Mammals. Seals. Eared Seals. True Seals. Walrus. Manatees. Whales. Baleen Whales. Toothed Whales. 10. Unusual Mammals. Opossums. Shrews and Moles. Bats. Armadillo. 11. Waterfowl. Ducks. Geese. Swans. 12. Game Birds. Quails. Partridges. Pheasants. Grouse. Turkeys. Pigeons and Doves. 13. Birds of Prey. Hawk-like Birds. Eagles, Hawks, and Kites. Falcons. Vultures. Osprey. Owls. Typical Owls. Barn Owls. 14. Songbirds and Other Perching Birds. Songbirds. Crows and Jays. Cuckoos. Kingfishers. Hummingbirds. 15. Other Birds of North America. Long-legged Wading Birds. Gull-like Birds. Upright Perching Waterbirds. Duck-like Birds. Sandpiper-like Birds. Chicken-like Marsh Birds. Upland Ground Birds. Swallows and Swifts. Tree-Clinging Birds. 16. Freshwater Fishes. Catfishes. Sunfishes. Perch. Trout, Char and Whitefishes. Pike. Sturgeons. Minnows and Suckers. 17. Anadromous and Diadromous Fishes. Salmon. Steelhead. Striped Bass. Shad. Freshwater Eels. 18. Saltwater Fishes and Fauna. Sharks, Skates, and Rays. Mackerel, Tuna, and Marlins. Flounder, Halibut, and Sole. Herring. Codfishes. Smelts. Sea Bass and Groupers. Mollusks. Crustaceans. 19. Reptiles and Amphibians. Reptiles. Alligators and Crocodiles. Lizards. Snakes. Turtles and Tortoises. Amphibians. Frogs and Toads. Salamanders and Newts. 20. Responsible Management of Wildlife Resources. Role of Private Institutions. Farmers and Ranchers. Industry. Private Citizens. Game

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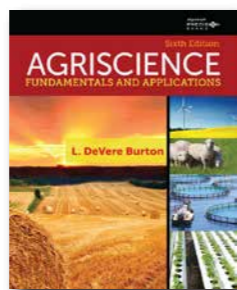
GENERAL AGRISCIENCE

AGRISCIENCE FUNDAMENTALS AND APPLICATIONS UPDATED, PRECISION EXAMS EDITION, 6E

L. DeVere Burton, Idaho State University

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In addition to providing a comprehensive overview of the agricultural industry and industry-based sciences, the Precision Exams Edition of Burton's *AGRISCIENCE: FUNDAMENTALS AND APPLICATIONS*, Sixth Edition, aligns to Precision Exams' Agricultural Science

exam. The text covers essential topics such as agriscience in the information age, natural resources, integrated pest management, plant science, animal science, food science, and communication and management, giving students with a solid foundation in the basic principles and practices of agriscience. The Precision Exams Edition also features new information related to the National FFA Organization and selecting and planning an SAE; how math, science, and social studies relate to agriscience; current technologies used in the industry; career opportunities; and advice for professional success and business ownership.

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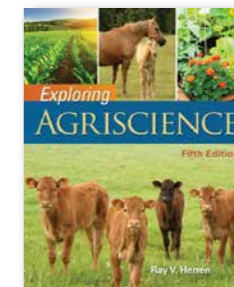
Wildlife Management. 12. Aquaculture. Part IV: INTEGRATED PEST MANAGEMENT. 13. Biological, Cultural, and Chemical Control of Pests. 14. Safe Use of Pesticides. Part V: PLANT SCIENCES. 15. Plant Structures and Taxonomy. 16. Plant Physiology. 17. Plant Reproduction. Part VI: CROP SCIENCE. 18. Home Gardening. 19. Vegetable Production. 20. Fruit and Nut Production. 21. Grain, Oil, and Specialty Field-Crop Production. 22. Forage and Pasture Management. Part VII: ORNAMENTAL USE OF PLANTS. 23. Indoor Plants. 24. Turfgrass Use and Management. 25. Trees and Shrubs. VIII: ANIMAL SCIENCES. 26. Animal Anatomy, Physiology, and Nutrition. 27. Animal Health. 28. Genetics, Breeding, and Reproduction. 29. Small Animal Care and Management. 30. Dairy and Livestock Management. 31. Horse Management. Part IX: FOOD SCIENCE AND TECHNOLOGY. 32. The Food Industry. 33. Food Science. Part X: COMMUNICATIONS AND MANAGEMENT IN AGRISCIENCE. 34. Marketing in Agriscience. 35. Agribusiness Planning. 36. Entrepreneurship in Agriscience. Glossary. Appendix A: Developing a Personal Budget. Appendix B: Plan Supervised Agricultural Experience Programs. Index.

EXPLORING AGRISCIENCE, 5E

Dr. Ray V. Herren, University of Georgia, Athens (Emeritus)

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Discover the exciting world of agriculture through *EXPLORING AGRISCIENCE*, Fifth Edition, the resource that continues to inspire and inform middle school students across the nation. The new, updated Fifth Edition of this respected text combines a strong grounding in fundamentals

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1. The World of Agriculture. 2. The History of Agriculture. 3. Soil: The Origin of Life. 4. Plant Structures and their Uses. 5. Agricultural Pests. 6. Floriculture. 7. Nursery Production. 8. Landscaping. 9. Fruit and Nut Production. 10. Row Crops. 11. Forest Science. 12. Protecting the Environment. 13. Organic Agriculture. 14. The Livestock Industry. 15. The Dairy Industry. 16. The Poultry Industry. 17. The Science of Aquaculture. 18. Urban Agriculture. 19. Companion Animals. 20. Preserving our Food Supply. 21. The Ethical Treatment of Animals. 22. Selecting and Using Hand Tools. 23. Small Engine Operation. 24. Biofuels. 25. Biotechnology: The Future of Agriculture. 26. High School Agricultural Education Programs. 27. Careers in Agricultural Science. English Glossary & Spanish Glosario.

LAB MANUAL FOR HERREN'S EXPLORING AGRISCIENCE, 5TH, 5E

Dr. Ray V. Herren, University of Georgia, Athens (Emeritus)

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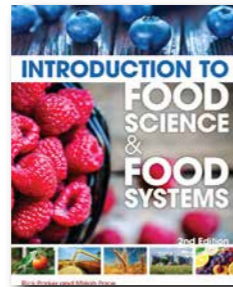
Revised for the current text edition, the Lab Manual for Herren's EXPLORING AGRISCIENCE, Fifth Edition, includes plenty of fun, hands-on experiments that help demonstrate what you are learning in your textbook.

INTRODUCTION TO FOOD SCIENCE AND FOOD SYSTEMS, 2E

Rick Parker, Ph.D., College of Southern Idaho, Twin Falls;
Miriah Pace, National Agricultural Institute

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INTRODUCTION TO FOOD SCIENCE AND FOOD SYSTEMS, 2nd Edition explores the foundations of the food industry, from nutrition and chemistry to processing and safety, and delves into some of the most pressing foodborne issues of our day. As the

world grapples with critical issues such as hunger and GMOs, opportunities abound in agriculture and food science careers, and INTRODUCTION TO FOOD SCIENCE AND FOOD SYSTEMS, 2nd Edition gives you the knowledge and skills required for success. Laced with full-color images, drawings, charts, and graphs, chapters deliver the latest information on genetically engineered foods, environmental concerns and sustainability, food needs of the world, the impacts of food on health, and more. INTRODUCTION TO FOOD SCIENCE AND FOOD SYSTEMS, 2nd Edition also tests your understanding of concepts with practical, hands-on activities in math, science and other key areas. Written with your future in mind, readings also correlate with National Agricultural Education Standards and FFA Career Development Events (CDEs) to prepare you for a meaningful career in today's agriscience industry.

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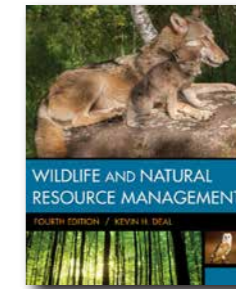
Radiant and Electrical Energy. 13. Fermentation, Microorganisms, and Biotechnology. 14. Food Chemistry. 15. Packaging. Section 3: FOODS AND FOOD PRODUCTS. 16. Milk. 17. Meat. 18. Poultry and Eggs. 19. Fish and Shellfish. 20. Cereal Grains, Legumes, and Oilseeds. 21. Fruits and Vegetables. 22. Fats and Oils. 23. Candies and Confectionary. 24. Beverages. Section 4: RELATED ISSUES. 25. Environmental Concerns and Processing. 26. Food Safety. 27. Regulations and Labeling. 28. World Food Needs. 29. Food and Health. 30. Careers in Food Science. Appendix A: Chemistry Review. Appendix B: Reference Tables. Appendix C: Harvesting and Storing Fruits, Nuts, and Vegetables. Glossary.

WILDLIFE & NATURAL RESOURCE MANAGEMENT, 4E

Kevin H. Deal, Northwest High School

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Understand how professionals manage the natural world with WILDLIFE AND NATURAL RESOURCE MANAGEMENT, 4E! From running fisheries and national parks to studying the environment and resources conservation,

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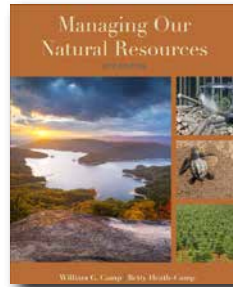
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MANAGING OUR NATURAL RESOURCES, 6E

William G. Camp, Virginia Polytechnic Institute and State University -- Blacksburg, Virginia; Betty Heath-Camp, Virginia Polytechnic Institute and State University

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ebook



Explore the world's natural resources and the ways professionals manage them with **MANAGING OUR NATURAL RESOURCES, 6th Edition!** Written for introductory agriculture courses, this book examines a broad variety of topics from forest fires and fishery management to water purification and energy conservation. Organized into an eight-unit overview, chapters cover the must-know fundamentals of land, water, and air, forestry, fish and wildlife, and energy and mineral resources, along with the issues impacting them today. Full-color photographs, illustrations, and case studies add depth and clarity to every chapter, while appendices urge you beyond the book to websites, certification programs, and additional learning opportunities that help you develop critical thinking skills. Now available in digital formats and with a variety of supplemental learning tools, **MANAGING OUR NATURAL RESOURCES, 6th Edition** invites you to dig into videos, self-quizzing, software, and apps that make learning extraordinary—and fun!

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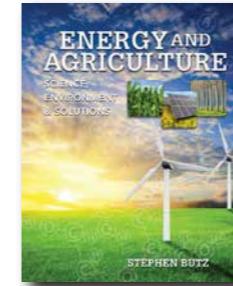
ENERGY AND AGRICULTURE

Science, Environment, and Solutions

Stephen Butz

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ebook



As worldwide demand for energy continues to rise and conventional non-renewable resources continue to dwindle in supply, the need for new, environmentally conscious ways to meet society's energy requirements are becoming increasingly important. **ENERGY AND AGRICULTURE** is designed to introduce you to the role that agriculture can play in helping to satisfy the world's energy demands. The use of agriculturally based fuel systems, also known as biofuels, as a means to supply energy to our technological society, provides environmentally safe, renewable energy options for all aspects of life, including industry, transportation, and electrical power generation. By providing a solid foundation in the energy and resources used historically combined with a look at future options toward more sustainable resources **ENERGY AND AGRICULTURE** provides a solid understanding of one of the most important issues of the twenty-first century.

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Systems. UNIT V: SOLID BIOENERGY FUELS FROM AGRICULTURE. 18. Solid Fuel Biomass Energy Resources. 19. Solid Biofuel Energy Production. 20. Environmental Impacts of Solid Biomass Fuels. UNIT VI: LIQUID BIOENERGY FUELS FROM AGRICULTURE. 21. Alcohol Transportation Fuels. 22. Biodiesel. 23. Biomass to Liquids. UNIT VII: GASEOUS BIOENERGY FUELS FROM AGRICULTURE. 24. Biogas. Glossary.

ENERGY AND AGRICULTURE LAB MANUAL

Stephen Butz

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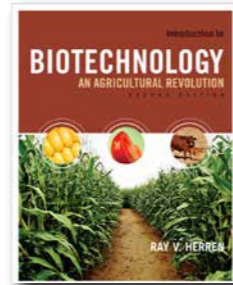
The Laboratory Manual is a valuable tool designed to enhance your lab experience. Lab activities, objectives, materials lists, step-by-step procedures, illustrations, and review questions are commonly found in a Lab Manual.

INTRODUCTION TO BIOTECHNOLOGY, 2E

Ray V. Herren, University of Georgia, Athens (Emeritus)

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ebook



INTRODUCTION TO BIOTECHNOLOGY: AN AGRICULTURAL REVOLUTION offers a thorough introduction to biotechnology and the ways it has revolutionized modern agriculture. This newly updated text provides a solid grounding in core biotechnology

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Preface. 1. The Phenomena of Biotechnology. 2. The Historical Development of Biotechnology. 3. The Principles of Scientific Research. 4. Cells: The Foundation of Life. 5. The Principles of Gene Transfer. 6. Producing Genetically Modified Organisms. 7. Animal Cloning. 8. Plant Cloning. 9. Biotechnology in Plant Science. 10. Biotechnology in Animal Reproduction. 11. Biotechnology in Medicine. 12. Biotechnology in the Food Industry. 13. Biotechnology in Ecology. 14. Consumer Concerns about Biotechnology. 15. Ethical Issues and Biotechnology. 16. Careers in Biotechnology.

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Ray V. Herren, University of Georgia, Athens (Emeritus)

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The Laboratory Manual is a valuable tool designed to enhance your lab experience and give you an opportunity to experience hands-on the materials covered in the core text. Lab activities, objectives, materials lists, step-by-step procedures, illustrations, and review questions are found in the Lab Manual.

AGRICULTURAL COMMUNICATIONS IN ACTION

A Hands-On Approach

Ricky Telg, University of Florida; Tracy Anne Irani, University of Florida

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Packed with real-life illustrations and practical applications, AGRICULTURAL COMMUNICATIONS IN ACTION: A HANDS-ON APPROACH helps you become an effective communicator. Focusing specifically on skills-building

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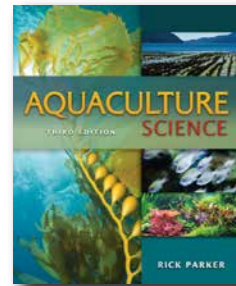
WORKING WITH THE MEDIA. 13. Media Relations. 14. Risk/Crisis Communication. Section VI: Putting it Together. 15. Persuasion and Persuasive Information and Educational Campaigns. 16. Special Events. 17. Communications Campaign Development. Section VII: THE FUTURE. 18. Future of Agricultural Communications.

AQUACULTURE SCIENCE, 3E

Rick Parker, Ph.D., College of Southern Idaho, Twin Falls

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ebook



This comprehensive book introduces you to the aquaculture industry. Every aspect of this growing field is covered, from history of aquaculture, descriptions of aquatic plants and animals and feeding to in-depth coverage of economics, marketing, management and diseases of aquatic animals and plants. AQUACULTURE SCIENCE, third edition, addresses latest production methods, species types, advances in technology, trends and statistics. The science of aquaculture, chemistry, biology, and anatomy and physiology, is stressed throughout to ensure that you understand the fundamental principles. A complete chapter offers detailed information on career opportunities in the aquaculture industry.

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1. Aquaculture Basics and History. Introduction and Definitions. Historical Patterns and Practices. Aquaculture Activities. The Future of Aquaculture. 2. Aquatic Animals. US Aquatic Animal Species. Common Characteristics of Aquatic Species. Structure and Functions of Aquatic Animals. 3. Marketing Aquaculture. International Production. Consumption. Marketing Basics. Processing. Inspection. 4. Management Practices for Finfish. Spawning. Sex Determination. Finfish. Controls. Genetics. 5.

Recreational Fishing Industry. Brief History of Recreational Fishing. Methods of Fishing. Types of Fish. Impact of Recreational Fishing. U.S. Fish & Wildlife Service. Pacific Salmon. 6. Raising Ornamental Fish. Sources of species. Specific Ornamental Fish. Florida Tropical Ornamental Fish Culture. 7. Management Practices for Crustaceans and Mollusks. Culture Status. Other Commercial Species. 8. Management Practices for Alligators, Frogs and Plants. Alligators. Frogs. Aquatic Plants. 9. Fundamentals of Nutrition in Aquaculture. Nutrition of Fish. 10. Feeds and Feeding. Diet Formulation and Processing. Feeding Aquatic Animals. Other Warmwater Fish. Time of First Feeding. Feed Calculations. Aquatic Plants. 11. Health of Aquatic Animals. Health Management. Stress and Disease. Disease Resistance. Disease Types. Parasitic Diseases. Fungus. Bacterial Diseases. Viral Diseases. Noninfectious Diseases. Determining the Presence of Disease. Disease Treatment. Calculating Treatments. Immunization. 12. Water Requirements for Aquaculture. Water Qualities, Measurements, and Alterations. Other Factors. Obtaining Water. Managing Water. Calculating Treatments. Disposing of Water. 13. Aquatic Structures and Equipment. Ponds. Construction of Levee-Type Ponds. Raceways and Tanks. Cages and Pens. Other Major Equipment. 14. Aquariums. Background. Fish for the Aquarium. Choosing and Establishing an Aquarium. Managing the Aquarium. Water Quality. Aquarium Checklist. 15. Recirculating Systems. Background. System Design. System Management. 16. Sustainable Aquaculture and Aquaponics. Attempts to Define Sustainable. Standards of Sustainable Aquaculture. Aquaponics. Sustainable Standards Score Card. 17. Aquaculture Business. Counting the Cost. Managing the Business. Planning-The Secret of Business Success. Setting Goals for Business Management Decisions. Business and Risky Decisions. Business Structures. Records Improve Profitability. Using an Accounting System for Analysis. Computers and Management. Decisions. Obtaining Credit. Human Resources. Business Managers of Tomorrow. 18. Career Opportunities in Aquaculture. General Skills and Knowledge. Intangible Skills. Entrepreneurship. Jobs in Aquaculture. Aquaculture Industry Supervised Agricultural Experience. Education and Experience. Identifying a Job. Getting a Job. Appendix. Glossary. Index.

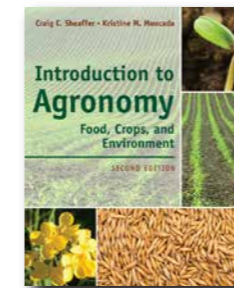
INTRODUCTION TO AGRONOMY, 2E

Food, Crops, and Environment

Craig C. Sheaffer, University of Minnesota; Kristine M. Moncada, University of Minnesota

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ebook



This full-color introduction to agronomy and crop science offers both traditional agricultural students and students with nonagricultural backgrounds a timely look at the principles of crop science, sustainable agriculture, and a host of related societal issues. A must-read text for

anyone interested in what are arguably the most profoundly important issues of our time, INTRODUCTION TO AGRONOMY, second edition addresses the basics of safe and sustainable food and fiber production as well as big picture topics such as energy, ecology, and environmental quality. Throughout the text, readers will find information and illustrations on the latest agricultural methods, regulations, and practices--and how each is impacting our society and each individual within it.

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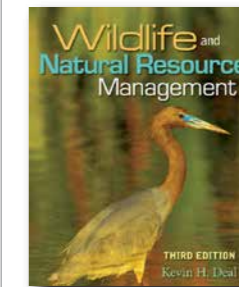
1. History of Agriculture. 2. Agriculture Today. 3. Feeding the World. 4. Classifying and Naming Crops. 5. Food and Energy from Plants. 6. Chemistry of Food and Plants. 7. Plant Anatomy and Morphology. 8. Plant Physiology and Growth. 9. Improving Plants. 10. Environment. 11. Agroecosystems. 12. Soils. 13. Cropping Systems. 14. Tillage and Crop Establishment. 15. Weeds. 16. Plant Disease and Insects. 17. Harvesting. 18. Organic Agriculture. 19. Crop Profiles: Grasses. 20. Crop Profiles: Legumes. 21. Crop Profiles: Other Crops. Appendix I: Scientific and Common Names. Appendix II: Metric Conversion Chart. Appendix III: Bushel Weights. Glossary. Index.

WILDLIFE AND NATURAL RESOURCE MANAGEMENT, 3E

Kevin H. Deal, Northwest High School

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Take an in-depth look at the very complex world of wildlife, fisheries, and natural resource management with this indispensable resource that is packed with valuable learning aids like end-of-chapter student activities, a glossary of key terms, and

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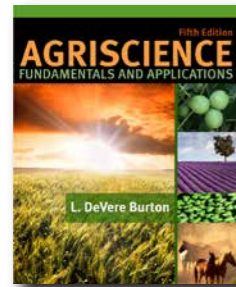
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AGRISCIENCE FUNDAMENTALS AND APPLICATIONS, 5E

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Agriscience Fundamentals and Applications, 5th edition is an introductory applied science textbook intended for use in high school agriculture programs.

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GENERAL HORTICULTURE

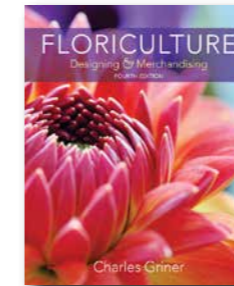
FLORICULTURE, 4E

Designing & Merchandising

Dr. Charles P. Griner, Colquitt County H.S., Moultrie, GA

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CENGAGE | MINDTAP ebook



Master the basics of constructing floral arrangements and explore your creativity with this engaging, reader-friendly text. FLORICULTURE: DESIGNING AND MERCHANDISING, Fourth Edition, provides a comprehensive introduction

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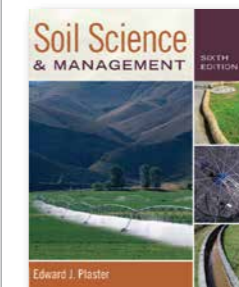
BUSINESS OPERATIONS & PROFESSIONAL DEVELOPMENT. 22. Pricing Strategies. 23. Selling in the Flower Shop. 24. Displays. 25. Delivery. 26. Professional Organizations. Appendix A: Cut Flowers. Appendix B: Cut Foliages. Appendix C: Dried Materials. Appendix D: Foliage Houseplants. Appendix E: Permanent Flowering Potted Plants. Appendix F: Temporary Flowering Potted Plants. Appendix G: Flower Arrangement Rating Scale. Appendix H: Floral Design Related Websites. Appendix I: Suggested Supervised Agricultural Experience Activities.

SOIL SCIENCE AND MANAGEMENT, SOFT COVER, 6E

Edward Plaster, Dakota County Technical College, MN

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ebook



Gain a practical understanding of soil properties and the soil management techniques most important for the effective use of soils with SOIL SCIENCE AND MANAGEMENT, 6E. This non-technical, reader-friendly book details all

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1. The Importance of Soil. 2. Soil Origin and Development. 3. Soil Classification and Survey. 4. Physical Properties of Soil. 5. Life in the Soil. 6. Organic Matter. 7. Soil Water. 8. Water Conservation. 9. Drainage and Irrigation. 10. Soil Fertility. 11. Soil pH and Salinity. 12. Plant Nutrition. 13. Soil Sampling and Testing. 14. Fertilizers. 15. Organic Amendments. 16. Tillage and Cropping Systems. 17. Horticultural Uses of Soil. 18. Soil Conservation. 19. Urban Soil. 20. Government Agencies and Programs. Appendices. 1. Some Basic Chemistry. 2. Soil Orders of the United States. 3. Soil Horizon Symbol Suffixes. 4. Land Evaluation. 5. Preferred Soil Characteristics for Selected Trees. Glossary. Index.

TURFGRASS SCIENCE AND MANAGEMENT, 5E

Robert Emmons, *State University of New York, Cobleskill*;
Frank Rossi, Ph.D., *Cornell University*

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ebook



Featuring green environmental practices and current information from recognized leaders in the field, the fifth edition of **TURFGRASS SCIENCE AND MANAGEMENT** invites you into the thriving turfgrass industry. Designed for both aspiring and practicing turfgrass managers, the book explains the science behind plant growth and soil properties and how to evaluate, establish and maintain a variety of green spaces, including golf courses, athletic fields, and landscaped lawns. In addition, **TURFGRASS SCIENCE AND MANAGEMENT** offers a review of critical math skills, an inside look at careers opportunities, and practical advice on effective business management practices to help prepare you for success!

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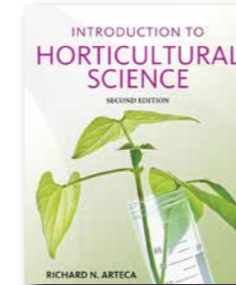
Preface. About the Authors. 1. The Turfgrass Industry. 2. Introduction to Turfgrass. 3. Warm-Season Grasses. 4. Cool-Season Grasses. 5. Introduction to Soils. 6. Soil Modification and Drainage. 7. Soil Chemistry. 8. Soil Testing. 9. Establishment. 10. Fertilization. 11. Mowing. 12. Water and Irrigation. 13. Pesticides. 14. Weeds. 15. Insects. 16. Turfgrass Diseases. 17. Integrated Pest Management. 18. Other Turfgrass Problems. 19. Improving Unsatisfactory Turf. 20. Golf Course Management. 21. Lawns and Other Turf Areas. 22. Sports Turf. 23. Business Management Practices. 24. Turfgrass Calculations. Appendix A: Conversion Tables. Appendix B: Sprayer Calibration. Appendix C: Spreader Calibration. Appendix D: Identification of Grasses by Vegetative Characteristics. Appendix E: Seed Identification. Glossary. Bibliography. Index.

INTRODUCTION TO HORTICULTURAL SCIENCE, 2E

Richard N. Arteca, *The Pennsylvania State University*

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Ideal for any introductory course in horticulture science, the Second Edition of **INTRODUCTION TO HORTICULTURAL SCIENCE** covers everything you need to know in a comprehensive format that is easy to understand. With topics ranging from gene

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1. The Green Plant, What an Organism. 2. Origin and Domestication of Plants. 3. The Horticulture Industry: An Important Part of Agriculture. 4. Fundamental Steps Leading to Success in a Horticulture Career. 5. The Relationship between Horticulture and the Environment. 6. Classification of Plants and Plant Anatomy. 7. Plant Propagation. 8. Media, Nutrients and Fertilizers. 9. Plants and Environment. 10. Plant Growth Regulators. 11. Post Harvest Physiology. 12. Pest Management. 13. Plant Biotechnology and Genetically Modified Organisms: An Overview. 14.

Greenhouse Structures. 15. Growing Crops in the Greenhouse. 16. Producing Nursery Crops. 17. Factors to Consider in Establishing Horticultural Operations. 18. Floral Design. 19. Interiorscaping. 20. Designing Landscapes. 21. Installing Landscapes. 22. Landscape Maintenance. 23. Warm- and Cool Season Turfgrass. 24. Olericulture. 25. Pomology: Fruit and Nut Production. 26. Organic Agriculture. 27. Hydroponics.

LAB MANUAL FOR PLASTER'S SOIL SCIENCE AND MANAGEMENT, 5TH, 6E

Edward Plaster, Dakota County Technical College, MN

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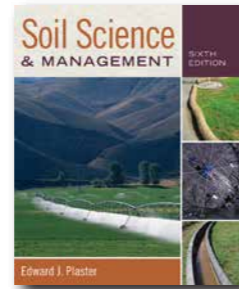
The Laboratory Manual is a valuable tool designed to enhance your lab experience. Lab activities, objectives, materials lists, step-by-step procedures, illustrations, and review questions are commonly found in a Lab Manual.

SOIL SCIENCE AND MANAGEMENT, 6E

Edward Plaster, Dakota County Technical College, MN

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Gain a practical understanding of soil properties and the soil management techniques most important for the effective use of soils with SOIL SCIENCE AND MANAGEMENT, 6E. This non-technical, reader-friendly book details all

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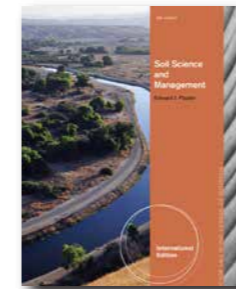
Agencies and Programs. Appendices. 1. Some Basic Chemistry. 2. Soil Orders of the United States. 3. Soil Horizon Symbol Suffixes. 4. Land Evaluation. 5. Preferred Soil Characteristics for Selected Trees. Glossary. Index.

SOIL SCIENCE AND MANAGEMENT, INTERNATIONAL EDITION, 6E

Edward Plaster, Dakota County Technical College, MN

© 2014, 544pp, Paperback, 9780840024381

ebook



Gain a practical understanding of soil properties and the soil management techniques most important for the effective use of soils with SOIL SCIENCE AND MANAGEMENT, International Edition. This non-technical, reader-

friendly book details all aspects of effective soil usage, including management techniques, composition, fertility, erosion, conservation, and irrigation. These topics are integrated into a practical guide to help readers better understand and manage soil as a natural resource. This edition highlights horticultural uses of soil as well as the latest green methodologies in both agricultural and horticultural practice. New content reflects the most recent science and environmental issues related to soil use, conservation, and sustainability. Updates related to nutrient management and best practices, legal issues, and government programs are also included. A complete support package for class preparation, testing and review includes a new CourseMate website that extends learning with interactive resources to further students' understanding and skills.

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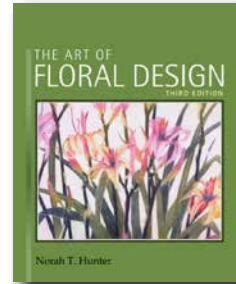
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THE ART OF FLORAL DESIGN, 3E

Norah T. Hunter

© 2013, 608pp, Hardback, 9781418063030

ebook



Plan your career in floral design with the 3rd Edition of THE ART OF FLORAL DESIGN! Newly expanded and updated, the book introduces you to the full range of floral design techniques, from basic to advanced, with vivid photographs, colorful

illustrations, and easy-to-understand descriptions. THE ART OF FLORAL DESIGN, 3rd Edition balances theory with practice, covering the history of design, artistic elements, floral anatomy, and nomenclature, along with techniques, tools, and specialties. Much more than a design book, THE ART OF FLORAL DESIGN, 3rd Edition prepares you for a 21st century career with discussions on distribution, business practices, and other industry-specific issues that lead you to future success both in and out of the classroom.

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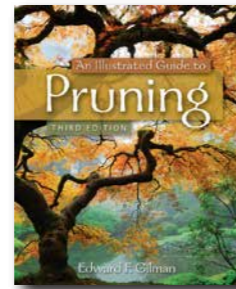
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AN ILLUSTRATED GUIDE TO PRUNING, 3E

Dr. Edward F. Gilman, University of Florida

© 2012, 352pp, Paperback, 9781111307301

ebook



Well written and easy to understand, AN ILLUSTRATED GUIDE TO PRUNING, Third Edition is a must-have for anyone interested in the pruning and maintenance of trees. Filled with updated illustrations, photographs, and examples, this

completely updated guide is designed to help you understand and implement the appropriate pruning practices that are vital to developing sustainable structure in the first 25 years of a tree's life. Coverage includes numerous different tree species as well as information about the challenges associated with pruning such as disease prevention, root pruning, mature tree pruning, and restoration following storms. With its simple tables, lists, and strategies, this completely updated guide is a handy resource for understanding pruning cuts, tree structure, and specialized pruning techniques.

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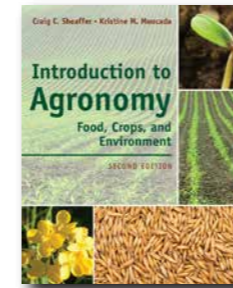
INTRODUCTION TO AGRONOMY, 2E

Food, Crops, and Environment

Craig C. Sheaffer, University of Minnesota; Kristine M. Moncada, University of Minnesota

© 2012, 608pp, Hardback, 9781111312336

ebook



This full-color introduction to agronomy and crop science offers both traditional agricultural students and students with nonagricultural backgrounds a timely look at the principles of crop science, sustainable agriculture, and a host of

related societal issues. A must-read text for anyone interested in what are arguably the most profoundly important issues of our time, INTRODUCTION TO AGRONOMY, second edition addresses the basics of safe and sustainable food and fiber production as well as big picture topics such as energy, ecology, and environmental quality. Throughout the text, readers will find information and illustrations on the latest agricultural methods, regulations, and practices--and how each is impacting our society and each individual within it.

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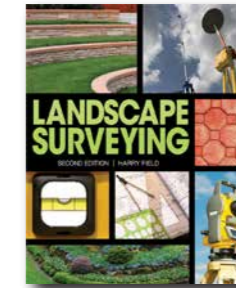
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LANDSCAPE SURVEYING, 2E

Harry L. Field, Assistant Professor, Department of Agricultural Engineering, Oklahoma State University, USA

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ebook



Practical and easy to read, LANDSCAPE SURVEYING, Second Edition is a perfect guide to landscape surveying that does not assume that you have a civil engineering or advanced math degree. Through illustrations, examples, and sample problems, you will

not only learn methods for measuring distances and angles and completing surveys, but will also learn to determine which method is best suited for individual situations. With coverage of relevant terms, methodologies, equipment, and topography, this text prepares you to easily apply the principles and methods of surveying in a variety of occupational settings.

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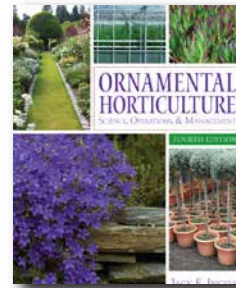
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ORNAMENTAL HORTICULTURE, 4E

Jack E. Ingels, State University of New York at Cobleskill
(Emeritus)

© 2010, 544pp, Hardback, 9781435498167

ebook



ORNAMENTAL HORTICULTURE: SCIENCE, OPERATIONS, AND MANAGEMENT, 4E is a comprehensive introduction, for both hobbyists and professionals, to the art and science of ornamental horticulture.

This book provides a balanced coverage of the different elements integral to this exciting field, including the science of ornamental horticulture, crop production, craftsmanship, and business management skills. ORNAMENTAL HORTICULTURE, 4E offers readers a realistic view of the business skills required to be successful in this growing industry, while also giving them the chance to develop their own creativity. Extensive full color illustrations, detailed list of objectives, and comprehensive review questions will help students monitor their progress.

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HORTICULTURE/AGRONOMY

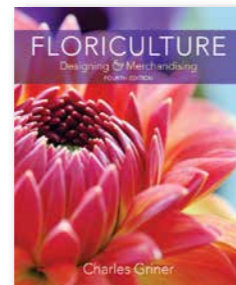
FLORICULTURE, 4E

Designing & Merchandising

Dr. Charles P. Griner, Colquitt County H.S., Moultrie, GA

© 2019, 448pp, Hardback, 9781337390705

CENGAGE | MINDTAP ebook



Master the basics of constructing floral arrangements and explore your creativity with this engaging, reader-friendly text. FLORICULTURE: DESIGNING AND MERCHANDISING, Fourth Edition, provides a comprehensive introduction

to the floral design industry and includes step-by-step instructions—complete with high-quality images and detailed material lists—for a wide range of floral design projects. Projects are built around low-cost materials to help you avoid breaking the budget, but the author also offers insights related to alternate materials you're likely to find in a typical floral shop today.

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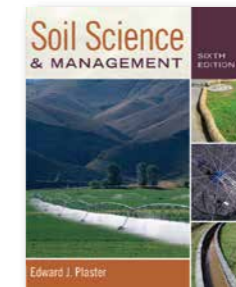
Greens. 5. Conditioning and Storing Cut Flowers and Greens. 6. Mechanics and Supplies Used in Floral Design. 7. Selecting Wire and Wiring Flowers. 8. Selecting Ribbons and Tying Bows. Part III: BASIC ARRANGEMENTS. 9. Boutonnieres and Corsages. 10. Bud Vases. 11. Circular Arrangements. 12. Triangular Arrangements. 13. Line Arrangements. Part IV: SPECIALTY ARRANGEMENTS. 14. Constructing Wreaths. 15. Holiday Arrangements. 16. Wedding Flowers. 17. Sympathy Flowers. 18. Drying Flowers. 19. Arranging Permanent Flowers. Part V: INDOOR PLANTS. 20. Selecting Indoor Plants. 21. Decorating Potted Plants. Part VI: BUSINESS OPERATIONS & PROFESSIONAL DEVELOPMENT. 22. Pricing Strategies. 23. Selling in the Flower Shop. 24. Displays. 25. Delivery. 26. Professional Organizations. Appendix A: Cut Flowers. Appendix B: Cut Foliages. Appendix C: Dried Materials. Appendix D: Foliage Houseplants. Appendix E: Permanent Flowering Potted Plants. Appendix F: Temporary Flowering Potted Plants. Appendix G: Flower Arrangement Rating Scale. Appendix H: Floral Design Related Websites. Appendix I: Suggested Supervised Agricultural Experience Activities.

SOIL SCIENCE AND MANAGEMENT, SOFT COVER, 6E

Edward Plaster, Dakota County Technical College, MN

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ebook



Gain a practical understanding of soil properties and the soil management techniques most important for the effective use of soils with SOIL SCIENCE AND MANAGEMENT, 6E. This non-technical, reader-friendly book details all aspects of

effective soil usage, including management techniques, composition, fertility, erosion, conservation, and irrigation in this practical guide. This edition highlights horticultural uses of soil as well as the latest green methodologies in both agricultural and horticultural practice from the perspective of farmers, horticulturalists, environmentalists and others who are concerned about how soils work and how they can be used most effectively. This edition further examines nutrient management and best practices with the latest updates on legal issues and government programs that make it a useful resource now and invaluable reference for the future.

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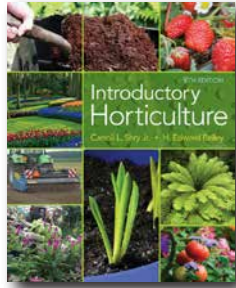
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INTRODUCTORY HORTICULTURE, 9E

Carroll Shry, Brandywine Landscaping; H. Edward Reiley

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Providing the most up-to-date coverage of basic principles and methods of practical application, **INTRODUCTORY HORTICULTURE, 9e**, offers many avenues to explore the horticulture field and remain on the cutting-edge of the industry.

Extremely student friendly, the text fully engages you within the learning experience through vivid imagery, a variety of activities, step-by-step procedures, and additional resources encouraging further exploration. The Ninth Edition emphasizes organic and sustainable farming methods, introduces new and emerging technology, and focuses on organizations and career development paths relevant to budding horticulturists. Through extensive full-color visuals, current information, and engaging activities, this all-new edition ensures success within a horticulture course - and well beyond.

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LAB MANUAL FOR SHRY/REILEY'S INTRODUCTORY HORTICULTURE, 9TH, 9E

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TURFGRASS SCIENCE AND MANAGEMENT, 5E

Robert Emmons, State University of New York, Cobleskill;
Frank Rossi, Ph.D., Cornell University

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Featuring green environmental practices and current information from recognized leaders in the field, the fifth edition of **TURFGRASS SCIENCE AND MANAGEMENT** invites you into the thriving turfgrass industry. Designed for both aspiring and practicing

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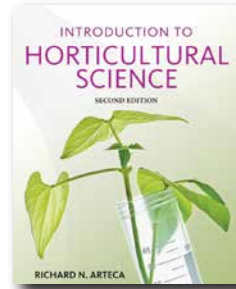
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INTRODUCTION TO HORTICULTURAL SCIENCE, 2E

Richard N. Arteca, *The Pennsylvania State University*

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ebook



Ideal for any introductory course in horticulture science, the Second Edition of INTRODUCTION TO HORTICULTURAL SCIENCE covers everything you need to know in a comprehensive format that is easy to understand. With topics ranging from gene

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1. The Green Plant, What an Organism. 2. Origin and Domestication of Plants. 3. The Horticulture Industry: An Important Part of Agriculture. 4. Fundamental Steps Leading to Success in a Horticulture Career. 5. The Relationship between Horticulture and the Environment. 6. Classification of Plants and Plant Anatomy. 7. Plant Propagation. 8. Media, Nutrients and Fertilizers. 9. Plants and Environment. 10. Plant Growth Regulators. 11. Post Harvest Physiology. 12. Pest Management. 13. Plant Biotechnology and Genetically Modified Organisms: An Overview. 14.

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LAB MANUAL FOR PLASTER'S SOIL SCIENCE AND MANAGEMENT, 5TH, 6E

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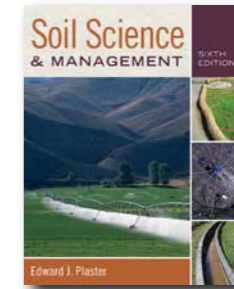
The Laboratory Manual is a valuable tool designed to enhance your lab experience. Lab activities, objectives, materials lists, step-by-step procedures, illustrations, and review questions are commonly found in a Lab Manual.

SOIL SCIENCE AND MANAGEMENT, 6E

Edward Plaster, *Dakota County Technical College, MN*

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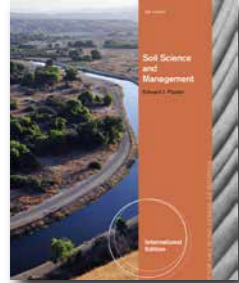
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Edward Plaster, *Dakota County Technical College, MN*

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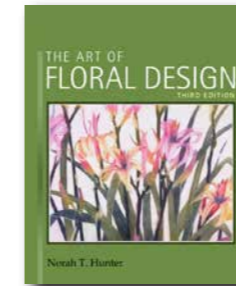
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Norah T. Hunter

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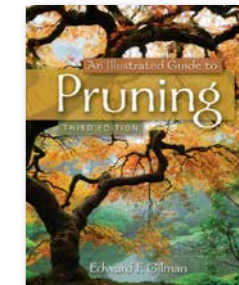
Introduction. 1. Harvest and Distribution. 2. Flower Retailing. 3. Careers and Continuing Education. 4. Nomenclature. 5. Postharvest Physiology. 6. Care and Handling. 7. Design, Style, Harmony, and Unity. 8. Color. 9. Balance, Proportion and Scale. 10. Focal Point and Rhythm. 11. Line, Form, Space and Depth. 12. Texture and Fragrance. 13. Tools, Containers, and the Mechanics of Arrangement. 14. Flower and Foliage Forms. 15. Shapes of Floral Arrangements. 16. Special Occasion and Holidays. 17. Flowers to Wear. 18. Everlasting Designs. 19. A History of Floral Design. 20. Oriental Style of Design. 21. Contemporary Style and Technique. 22. Wedding Flowers. 23. Sympathy Flowers. 24. Flowers. 25. Foliages. Glossary. Bibliography. Index.

AN ILLUSTRATED GUIDE TO PRUNING, 3E

Dr. Edward F. Gilman, *University of Florida*

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ebook



Well written and easy to understand, **An Illustrated Guide to Pruning, Third Edition** is a must-have for anyone interested in the pruning and maintenance of trees. Filled with updated illustrations, photographs, and examples, this

completely updated guide is designed to help you understand and implement the appropriate pruning practices that are vital to developing sustainable structure in the first 25 years of a tree's life. Coverage includes numerous different tree species as well as information about the challenges associated with pruning such as disease prevention, root pruning, mature tree pruning, and restoration following storms. With its simple tables, lists, and strategies, this completely updated guide is a handy resource for understanding pruning cuts, tree structure, and specialized pruning techniques.

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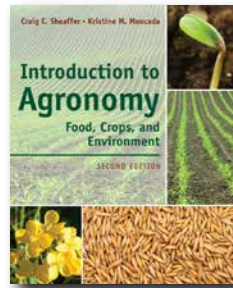
INTRODUCTION TO AGRONOMY, 2E

Food, Crops, and Environment

Craig C. Sheaffer, University of Minnesota; Kristine M. Moncada, University of Minnesota

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This full-color introduction to agronomy and crop science offers both traditional agricultural students and students with non agricultural backgrounds a timely look at the principles of crop science, sustainable agriculture, and a host of

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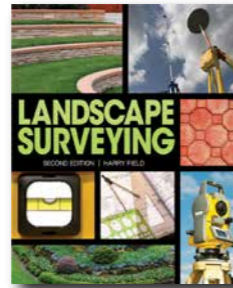
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LANDSCAPE SURVEYING, 2E

Harry L. Field, Assistant Professor, Department of Agricultural Engineering, Oklahoma State University, USA

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Practical and easy to read, LANDSCAPE SURVEYING, Second Edition is a perfect guide to landscape surveying that does not assume that you have a civil engineering or advanced math degree. Through illustrations, examples, and sample problems, you will

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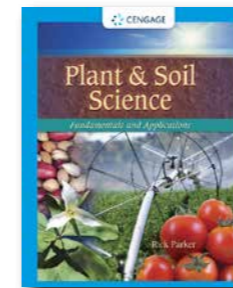
PLANT & SOIL SCIENCE

Fundamentals & Applications

R.O. (Rick) Parker, Ph.D., College of Southern Idaho

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Plant & Soil Science Fundamentals and Applications combines the basic knowledge of plant and soil science, in an easy to read and teach format, and provides practical "real world" application for information learned.

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LANDSCAPE DESIGN

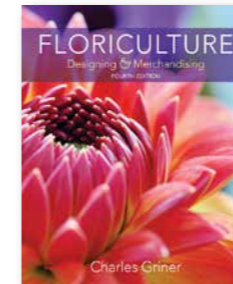
FLORICULTURE, 4E

Designing & Merchandising

Dr. Charles P. Griner, Colquitt County H.S., Moultrie, GA

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Master the basics of constructing floral arrangements and explore your creativity with this engaging, reader-friendly text. **FLORICULTURE: DESIGNING AND MERCHANDISING**, Fourth Edition, provides a comprehensive introduction

to the floral design industry and includes step-by-step instructions--complete with high-quality images and detailed material lists--for a wide range of floral design projects. Projects are built around low-cost materials to help you avoid breaking the budget, but the author also offers insights related to alternate materials you're likely to find in a typical floral shop today.

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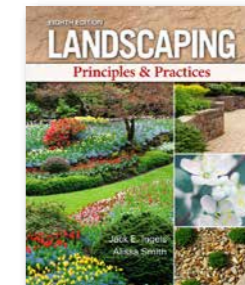
LANDSCAPING, 8E

Principles & Practices

Jack E. Ingels, State University of New York at Cobleskill (Emeritus); Alissa F. Smith, National Association of Agricultural Educators (NAAE)

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LANDSCAPING PRINCIPLES AND PRACTICES, Eighth Edition, provides a solid foundation in three areas of modern professional practice: landscape design, contracting and management. Updated to reflect today's industry, the

text includes new information, new practical learning features, and all-new photos and illustrations. Coverage begins with an overview of landscape design principles and processes, and then explores contracting, installation, maintenance, and professional specialization. The text also features expanded information on the National FFA Organization and content aligned to the Precision Exam for Landscape Management, making it easier to connect classroom work to current industry needs, standards, and certifications.

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TURFGRASS SCIENCE AND MANAGEMENT, 5E

Robert Emmons, State University of New York, Cobleskill;
Frank Rossi, Ph.D., Cornell University

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Featuring green environmental practices and current information from recognized leaders in the field, the fifth edition of **TURFGRASS SCIENCE AND MANAGEMENT** invites you into the thriving turfgrass industry. Designed for both aspiring and practicing turfgrass managers, the book explains the science behind plant growth and soil properties and how to evaluate, establish and maintain a variety of green spaces, including golf courses, athletic fields, and landscaped lawns. In addition, **TURFGRASS SCIENCE AND MANAGEMENT** offers a review of critical math skills, an inside look at careers opportunities, and practical advice on effective business management practices to help prepare you for success!

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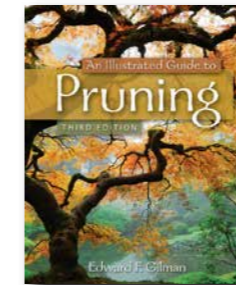
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Dr. Edward F. Gilman, University of Florida

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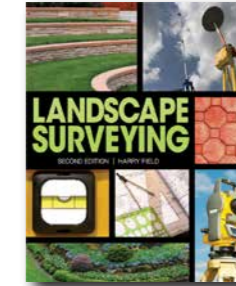
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LANDSCAPE SURVEYING, 2E

Harry L. Field, Assistant Professor, Department of Agricultural Engineering, Oklahoma State University, USA

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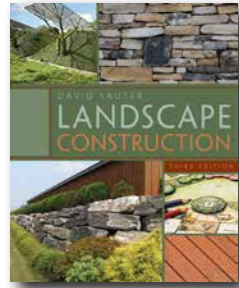
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LANDSCAPE CONSTRUCTION, 3E

David Sauter, Foothill College, Los Altos Hills, California

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Landscape Construction, 3rd edition will help you understand the process of construction and implementation of a multitude of exterior hardscape construction projects. This book begins with the preparation for construction and follows

through to the installation of the final elements of the landscape project. Future landscape contractors and designers will appreciate the detailed discussions about site preparation, grading and drainage, utilities and irrigation, retaining wall construction, paving, exterior carpentry and fencing and free-standing walls. Such amenities as pools, ponds, and edging are also discussed in detail. All instructions are well supported by photos and illustrations. Each section contains thorough installation information for most of the contemporary materials used in today's landscapes. David Sauter has provided you with expert perspective on materials and techniques, as well as easy-to-follow instructions.

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ORNAMENTAL HORTICULTURE, 4E

Jack E. Ingels, State University of New York at Cobleskill (Emeritus)

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ORNAMENTAL HORTICULTURE: SCIENCE, OPERATIONS, AND MANAGEMENT, 4E is a comprehensive introduction, for both hobbyists and professionals, to the art and science of ornamental horticulture.

This book provides a balanced coverage of the different elements integral to this exciting field, including the science of ornamental horticulture, crop production, craftsmanship, and business management skills. ORNAMENTAL HORTICULTURE, 4E offers readers a realistic view of the business skills required to be successful in this growing industry, while also giving them the chance to develop their own creativity. Extensive full color illustrations, detailed list of objectives, and comprehensive review questions will help students monitor their progress.

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VETERINARY TECHNOLOGY

NEW EDITION

VETERINARY ASSISTING FUNDAMENTALS AND APPLICATIONS, 2E

Beth Vanhorn, AS, CVT, Dauphin County Technical School, Veterinary Assistant Program; Robert Clark, PhD, Administrative Director - Dauphin County Technical School

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Vanhorn's VETERINARY ASSISTING: FUNDAMENTALS AND APPLICATIONS, 2ND EDITION, equips you with the knowledge and skills you need for success in real-world practice. Offering step-by-step explanations, the text begins with the

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FUNDAMENTALS OF PHARMACOLOGY FOR VETERINARY TECHNICIANS, 3E

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Want to be indispensable to your veterinary care team? Instead of memorizing drug names, elevate your understanding of the drugs used to treat animal patients with Romich's FUNDAMENTALS OF PHARMACOLOGY FOR VETERINARY

TECHNICIANS, 3E. Following a body-systems approach, you build a foundation knowledge about important drugs, their actions and potentially harmful effects, diseases the drugs treat, how to administer drugs safely and most effectively, and much more. And to make what you're learning practical, chapters cover veterinary technician roles, dosage calculations, legal requirements, pharmacy management, job duties and clinical tips. The MindTap platform also offers digital resources such as practice quizzes, games, drug updates, and other supplemental resources for use during your course, while studying for certification exams and in your career.

CONTENTS

1. A Brief History of Veterinary Pharmacology. 2. Veterinary Drug Development and Control. 3. Principles and Methods of Drug Administration. 4. Pharmacokinetics. 5. Veterinary Drug Use, Prescribing, Acquisition, and Pharmacy

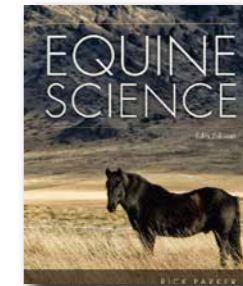
Management. 6. Systems of Measurement in Veterinary Pharmacology. 7. Drugs Affecting the Nervous System. 8. Drugs Acting on the Heart, Blood Vessels, and Blood. 9. Respiratory System Drugs. 10. Hormonal and Reproductive Drugs. 11. Gastrointestinal Drugs. 12. Urinary System Drugs. 13. Drugs Affecting Muscle Function. 14. Antimicrobials. 15. Antiparasitics. 16. Anti-Inflammatory and Pain-Reducing Drugs. 17. Drugs for Skin Conditions. 18. Ophthalmic and Optic Medications. 19. Fluid Therapy and Emergency Drugs. 20. Antineoplastic and Immunosuppressive Drugs. 21. Vaccines. 22. Behavior-Modifying Drugs. 23. Herbal Therapeutics. Appendix A: Unit Conversions and Math References. Appendix B: Conversion of Body Weight in Kilograms to Body Surface Area in Meters (for Dogs and Cats). Appendix C: Metric Conversions Guide. Appendix D: CRI Calculations. Appendix E: Vitamin Supplements. Appendix F: Inventory Management. Appendix G: Managing Animal Toxicities. Appendix H: Web Sites of Veterinary Pharmaceutical Companies (moved to MindTap). Appendix I: Proper Use of Needles and Syringes. Appendix J: Withdrawing (Aspirating) Medication from a Vial. Appendix K: Withdrawing (Aspirating) Medication from an Ampule. Appendix L: Reconstituting a Powder Medication for Administration. Appendix M: Drugs Listed Alphabetically and Classified by Category. Appendix N: Dos and Don'ts of Drug Administration. Appendix O: Euthanasia Procedure. Appendix P: Math Review (Moved to MindTap). Appendix Q: Drugs Used During Pregnancy. Appendix R: Answer Key to Text Questions (Moved to MindTap). Glossary.

EQUINE SCIENCE, 5E

R.O. (Rick) Parker, Ph.D., *College of Southern Idaho*

© 2019, 640pp, Hardback, 9781305949720

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This engaging, informative text provides a thorough introduction to equine care and management. EQUINE SCIENCE, Fifth Edition, features a full-color layout, numerous photos, and vivid illustrations that help bring chapter material to life, as well as a logical, easy-to-

understand sequence of topics. Following an introduction to the equine industry, you'll learn about horses' unique anatomy and needs; how to care for, train, and manage horses; and key business aspects of the industry. This all-new edition also clearly connects text content to National AFNR (Agriculture, Food, and Natural Resources) Standards, key math and science concepts, and current references, helping prepare you for success in the classroom and beyond.

CONTENTS

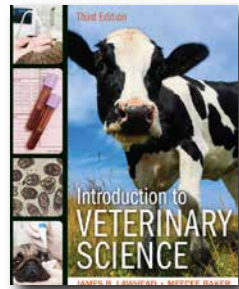
1. History and Development of the Horse. 2. Status and Future of the Horse Industry. 3. Breeds, Types, and Classes of Horses. 4. Cells, Tissues, and Organs. 5. Functional Anatomy. 6. Biomechanics of Movement. 7. Unsoundness. 8. Selecting and Judging Horses. 9. Determining Age, Height, and Weight of Horses. 10. Genetics. 11. Reproduction and Breeding. 12. Digestion and Nutrition. 13. Feeds and Feeding Horses. 14. Health Management. 15. Parasite Control. 16. Common Management Practices. 17. Shoeing and Hoof Care. 18. Buildings and Equipment. 19. Horse Behavior and Training. 20. Equitation. 21. Business Aspects. 22. Career Opportunities. Appendices. Glossary.

INTRODUCTION TO VETERINARY SCIENCE, SOFT COVER, 3E

MeeCee Baker; MeeCee Baker

© 2019, 448pp, Paperback, 9781337904650

ebook



INTRODUCTION TO VETERINARY SCIENCE, Third Edition, provides a solid foundation in this dynamic field for those studying animal and veterinary sciences or preparing for careers as veterinary assistants or technicians. The text begins

with an overview of cellular and tissue physiology, followed by chapters dedicated to individual body systems to enable easy comprehension. The authors then investigate crucial topics such as nutrition, disease, surgeries, cost analysis of procedures, safety, and professionalism. Throughout the text, real-life examples are integrated with chapter material to provide practical context, and both small and large animals are featured to expose students to the variety of cases they may encounter in the field. Each chapter opens with a “Day in the Life” preview that explores relevant applications of upcoming content, and chapters conclude with a description of clinical significance.

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Part I: COMPARATIVE ANATOMY AND PHYSIOLOGY. 1. Basic Cell Biology. 2. Tissue Types and Functions. 3. The Musculoskeletal System. 4. The Circulatory System. 5. The Respiratory System. 6. The Renal System. 7. The Digestive System. 8. The Reproductive System. 9. The Nervous System. 10. The Endocrine System. 11. The Immune System. Part II: NUTRITION. 12. Basic Nutrients. 13. Species Comparison. Part III: DISEASES. 14. Principles of Infectious Disease. 15. Disease Prevention. 16. Classification of Diseases. 17. Zoonoses. 18. Diagnosis of Disease. Part IV: SURGERY. 19. Principles of Surgery. Part V:

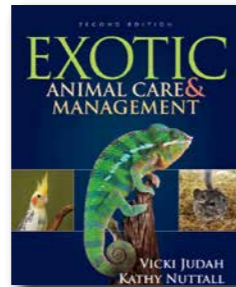
PROFESSIONALISM AND CAREERS. 20. Safety. 21. Careers and Decision Making in Veterinary Science. Glossary. Bibliography. Index.

EXOTIC ANIMAL CARE AND MANAGEMENT, 2E

Vicki Judah; Kathy Nutall, Jordan Applied Technology Center

© 2017, 384pp, Paperback, 9781285425085

ebook



Focusing exclusively on the care of exotic species as pets, EXOTIC ANIMAL CARE AND MANAGEMENT, 2ND EDITION delves into the unique behaviors, diet, housing considerations, handling and restraint methods, medical concerns and clinical procedures related

to the proper management of these animals. Reader-friendly and concise, each chapter covers a specific exotic animal commonly found in veterinary practice, including small mammals, birds, reptiles, amphibians, invertebrates, alpacas and llamas, miniature pigs and backyard chickens. Also included is an overview of specific concerns and zoonotic diseases associated with exotic animals so that you are fully prepared to contribute to their care and treatment.

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INTRODUCTION TO VETERINARY SCIENCE, 3E

James Lawhead; MeeCee Baker

© 2017, 448pp, Hardback, 9781111542795

ebook



INTRODUCTION TO VETERINARY SCIENCE, Third Edition, provides a solid foundation in this dynamic field for those studying animal and veterinary sciences or preparing for careers as veterinary assistants or technicians. The text begins

with an overview of cellular and tissue physiology, followed by chapters dedicated to individual body systems to enable easy comprehension. The authors then investigate crucial topics such as nutrition, disease, surgeries, cost analysis of procedures, safety, and professionalism. Throughout the text, real-life examples are integrated with chapter material to provide practical context, and both small and large animals are featured to expose students to the variety of cases they may encounter in the field. Each chapter opens with a “Day in the Life” preview that explores relevant applications of upcoming content, and chapters conclude with a description of clinical significance.

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PROFESSIONALISM AND CAREERS. 20. Safety. 21. Careers and Decision Making in Veterinary Science. Glossary. Bibliography. Index.

SMALL ANIMAL CARE AND MANAGEMENT, 4E

Dean M. Warren, Columbia City High School (retired)

© 2016, 656pp, Hardback, 9781285425528

ebook



Reader-friendly and engaging, SMALL ANIMAL CARE AND MANAGEMENT, Fourth Edition, offers a comprehensive guide to the care and husbandry of small animals. Through a logical flow of information, it introduces you to the basics

of the small animal industry, including the history, safety concerns and care and welfare of these animals before diving into the specifics of each, with chapters covering dogs, cats, reptiles, birds, fish and exotic species. Full-color photos and illustrations visually depict various breeds and their characteristics, anatomy, handling techniques, housing and other care concerns to facilitate learning, while activities and additional resources offer the opportunity for application and further study.

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1. Introduction to Small Animal Care. 2. Safety. 3. Small Animals and Pets. 4. Animal Rights and Animal Welfare. 5. Careers in Small Animal Care. 6. Nutrition and Digestive Systems. 7. Dogs. 8. Cats. 9. Rabbits. 10. Hamsters. 11. Gerbils. 12. Rats. 13. Mice. 14. Guinea Pigs. 15. Chinchillas. 16. Ferrets. 17. Hedgehogs. 18. Sugar Gliders. 19. Amphibians. 20. Reptiles. 21. Birds. 22. Fish. Glossary. Appendix A: Colleges of Veterinary Medicine. Appendix B: Veterinary Technology

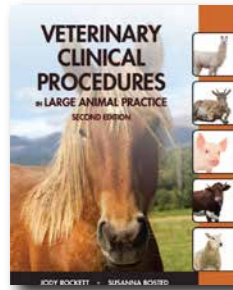
Programs. Appendix C: Recognized Veterinary Specialty Programs Appendix D: Reported Cases of Lyme Disease. Index.

VETERINARY CLINICAL PROCEDURES IN LARGE ANIMAL PRACTICES, 2E

Jody Rockett, DVM, College of Southern Idaho; Susanna Bosted, DVM, College of Southern Idaho

© 2016, 672pp, Hardback, 9781285424637

ebook



Delivering clear and concise step-by-step instructions, **VETERINARY CLINICAL PROCEDURES IN LARGE ANIMAL PRACTICE, 2e** thoroughly addresses the most common clinical procedures performed on horses, cattle, sheep, llamas, goats, and pigs in

large animal veterinary practice. Every procedure includes a stated purpose, a review of potential complications, a checklist of the equipment required, and step-by-step descriptions with corresponding rationale that not only explains what needs to be done, but why each action will lead toward a successful outcome for the patient. With the new inclusion of clinical procedures for sheep and the addition of current information related to each large animal considered, this edition seeks to fully prepare you with the skills you need in the field.

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SECTION I—CARE AND RESTRAINT TECHNIQUES. 1. Ropes and Knots. 2. Restraint Tools and Techniques. 3. Grooming and Stall Maintenance. SECTION II – PHYSICAL EXAMINATION. 4. Physical Examination. SECTION III – SAMPLE COLLECTION AND CLINICAL PROCEDURES. 5. Sample Collection. 6. Clinical Procedures. 7. Neonatal Clinical Procedures. SECTION IV – SURGICAL, RADIOGRAPHIC AND ANESTHETIC

PREPARATION. 8. Surgical Preparations. 9. Selected Lower Limb Radiographic Procedures. 10. Anesthetic.

WORKBOOK FOR WARREN'S SMALL ANIMAL CARE AND MANAGEMENT, 4TH, 4E

Dean M. Warren, Columbia City High School (retired)

© 2016, 288pp, Paperback, 9781285425559

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activities.

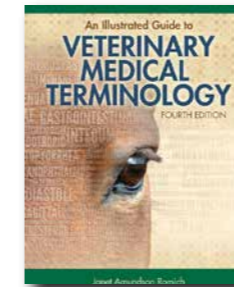
The student workbook is designed to help you practice and retain key chapter content. Included within this resource are multiple –type questions to evaluate your knowledge of chapter concepts, links to online resources, case studies and additional

AN ILLUSTRATED GUIDE TO VETERINARY MEDICAL TERMINOLOGY, 4E

Janet Amundson Romich, Madison Area Technical College

© 2015, 560pp, Paperback, 9781133125761

CENGAGE | MINDTAP ebook



Providing the ultimate terminology reference for veterinary assistants and technicians, **AN ILLUSTRATED GUIDE TO VETERINARY MEDICAL TERMINOLOGY, 4e** provides an engaging approach to learning medical terms and understanding basic

principles of veterinary medicine. This user-friendly book delivers a unique pedagogical presentation that makes it a comprehensive learning resource. Its systematic approach enables you to understand basic medical concepts and apply critical thinking skills in determining the meaning of new medical terms. Focusing on how medical terms are formed, analyzed, and defined, the book discusses anatomical landmarks, the positioning of animals, and the relationships between body parts. It also introduces terms used in the animal industry. Case studies illustrate how medical terminology is experienced in real-world practice and an audio wordlist enables you to hear the terms you are learning.

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1. Ready, Set, Go. 2. Where, Why, What. 3. Meat and Bones. 4. Head and Toe (And All Parts in Between). 5. What is in a Name? 6. Gut Instincts. 7. Null and Void. 8. Have a Heart. 9. A Breath of Fresh Air. 10. Skin Deep. 11. The Great Communicator. 12. 1 + 1 = 3 (or More). 13. Nerves of Steel. 14. Seeing and Hearing. 15. Feed and Protect Me. 16. Testing, Testing. 17. Drugs and Dissection. 18. Like Cats and Dogs. 19. Horse Sense. 20. Make Room for Ruminants. 21. Hog Haven. 22. Birds of a Feather. 23. All the Rest. Appendices. Index.

VETERINARY OFFICE PRACTICES, 2E

Vicki Judah

© 2012, 256pp, Paperback, 9781111139001

ebook



VETERINARY OFFICE PRACTICE, 2ND Edition provides an inside look at the exciting roles and responsibilities of veterinary assistants in animal hospitals or private veterinary practice, along with detailed instructions on scheduling, client relations,

charting, case management software, billing, and everything you need to work successfully within a veterinary practice. In addition to clear learning objectives, helpful charts and graphics, and reader-friendly concepts, **VETERINARY OFFICE PRACTICE, 2ND Edition's** includes case studies and review questions that allow you to apply chapter concepts and check your understanding.

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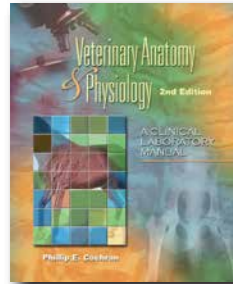
1. Introduction to Veterinary Practice. 2. Care and Maintenance of the Veterinary Practice Facility. 3. Front Office and Receptionist Duties. 4. Computers. 5. Communication Skills. 6. Interacting with Clients. 7. Stress. 8. Ethics. 9. Financial Matters.

LABORATORY MANUAL FOR COMPARATIVE VETERINARY ANATOMY & PHYSIOLOGY, 2E

Phillip E. Cochran, M.S., D.V.M.

© 2011, 400pp, Spiral, 9781435464339

ebook



Veterinary Anatomy & Physiology: A Clinical Laboratory Manual, 2E is designed as a lab manual for veterinary technology and pre-veterinary medicine students who possess a basic knowledge of biology. It is the only comparative

veterinary anatomy and physiology manual that covers cat dissection, sheep heart, brain and eye, and the pig's kidney. Veterinary Anatomy & Physiology: A Clinical Laboratory Manual, 2E also covers the muscular, digestive, respiratory, cardiovascular, urinary, reproductive, endocrine and nervous systems, as well as the skeletal anatomy of many species and the histology of tissues. This book's introduction to laboratory equipment and techniques will prepare you for lab work. Each chapter includes a physiology experiment to help illustrate for you some of the principles of physiology covered in the lecture portions of the course instruction.

CONTENTS

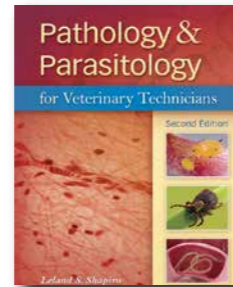
1. Terminology of Anatomy.
2. The Use of the Microscope.
3. Cellular Anatomy & Morphology.
4. General Principles of Histology.
5. Microscopic Anatomy of Tissues.
6. The Integumentary System.
7. The Skeletal System.
8. The Muscular System.
9. The Digestive System.
10. The Respiratory System.
11. The Cardiovascular System.
12. The Urinary System.
13. The Endocrine System.
14. The Genital System.
15. The Nervous System.
16. Organs of Special Sense.
17. Necropsy.

PATHOLOGY & PARASITOLOGY FOR VETERINARY TECHNICIANS, 2E

Dr. Leland S. Shapiro, L.A. Pierce College

© 2010, 304pp, Paperback, 9781435438552

ebook



PATHOLOGY AND PARASITOLOGY FOR VETERINARY TECHNICIANS, 2E is the publication professionals and future professionals turn to for detailed information on pathology and parasitology in veterinary medicine. It

features clear-cut descriptions, case studies, and methodologies experienced in the practical setting. Veterinary professionals and those in the animal, equine, dairy, and poultry fields will benefit from explanations about technical procedures, parasite life cycles, zoonotic potential, diagnosis, and treatment. A review of current literature provides valuable background, and the accompanying CD-ROM Image Library features extensive color images of parasites and various pathologies.

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Part I - Pathology Chapter 1: Introduction to Pathology. Chapter 2: Cell Injury and Cell Death. Chapter 3: Inflammation and Healing. Chapter 4: Review of the Circulatory System. Chapter 5: Neoplasia: An Introduction to Tumors. Chapter 6: Immunological Diseases. Chapter 7: Mechanisms of Infections and Causes of Infectious Disease. Chapter 8: Genetic Disorders. Chapter 9: Environmental and Nutritional Diseases. Chapter 10: Zoonosis and Safety on the Job. Part II - Parasitology Chapter 11: The Variety of parasites. Chapter 12: Ectoparasites of large animals. Chapter 13: Ectoparasites of small animals. Chapter 14: Endoparasites of Large Animals. Chapter 15: Endoparasites of small animals. Appendix: Specific Diseases of Selected Species. Specific How to do or Prepare Examples. Glossary.

VETERINARY TECHNICIAN'S POCKET PARTNER

A Quick Access Reference Guide

Marisa Bauer

© 2010, 256pp, Spiral, 9781428357822

ebook



THE VETERINARY TECHNICIAN'S POCKET PARTNER is a comprehensive, pocket-sized reference guide for the small animal practitioner. The easy to use format provides access to practical information needed to excel in the workplace. THE

VETERINARY TECHNICIAN'S POCKET PARTNER reviews common lab and nursing procedures, animal nutrition, and provides on-the-job terminology and abbreviations at your fingertips. The Pocket Partner also covers essential clinical topics relating to emergency care, surgery and pharmaceuticals, as well as additional information on standard office procedures. Instead of spending valuable time researching information, veterinary technicians can use the color-coded tabs, helpful websites, and charts like the canine and feline zoonotic table, to quickly access the information they need. The book's wipe and wash pages, and notes pages for personalized information ensure usability and durability.

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Chapter 1. Anatomy. Chapter 2. Anesthesia. Chapter 3. Cytology and Endocrine Function Testing. Chapter 4. Dentistry. Chapter 5. Emergencies. Chapter 6. Physical Examination. Chapter 7. Hematology. Chapter 8. Imaging. Chapter 9. Nursing Care. Chapter 10. Nutrition. Chapter 11. Medical Records and Office Procedures. Chapter 12. Parasitology. Chapter 13. Pharmaceuticals. Chapter 14. Pocket Pets. Chapter 15. Reproduction. Chapter 16. Surgery. Chapter 17. Urinalysis. Chapter 18. Vaccines and Disease. Chapter 19. Zoonosis.

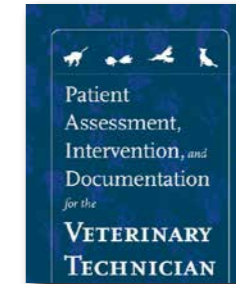
PATIENT ASSESSMENT, INTERVENTION AND DOCUMENTATION FOR THE VETERINARY TECHNICIAN

A Guide to Developing Care Plans and SOAP's

Jody Rockett, DVM, College of Southern Idaho; Cynthia Lattanzio; Katie Anderson

© 2009, 480pp, Spiral, 9781418067496

ebook



Patient Assessment, Intervention and Documentation for the Veterinary Technician addresses the methodology used to apply substantive information to real world problems in the education of veterinary technicians. Nursing students in human

medicine have long benefited from instruction in the Nursing Process, which is a method for using critical thinking skills to apply theoretical knowledge to actual cases. This text develops a similar methodology for veterinary technicians, called the "Technician Practice Model". This guide identifies and describes the various steps in the Technician Practice Model and provides both instruction and examples on documenting the results of that process. Particular emphasis is given to developing SOAP notes and Medication Administration/Order Records (MAOR).

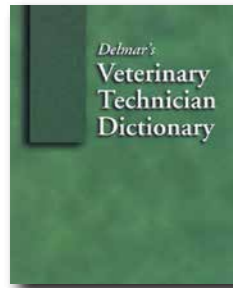
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DELMAR'S VETERINARY TECHNICIAN DICTIONARY

Dr. Ray V. Herren, University of Georgia, Athens (Emeritus);
Janet Amundson Romich, Madison Area Technical College;
Thomson Delmar Learning

© 2000, 360pp, Paperback, 9780766814219



Delmar's Veterinary Technology Pocket Dictionary is essential for veterinary technology students.

CONTENTS

Forward. Guide to Dictionary. A-Z Terms and Definitions. Appendices: A- Weight Conversion Table. B- Commonly Used Abbreviations. C- Reference Laboratory Values for Dogs and Cats. D- Reference Laboratory Values for Horses and Large Animals. E- Annotated Internet Resources.

APPLIED MATHEMATICS FOR CAREERS

MATH FOR AUTOMECHANICS

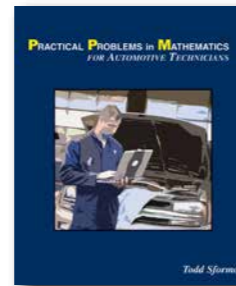
PRACTICAL PROBLEMS IN MATHEMATICS, 7E

For Automotive Technicians

Todd Sformo, Ilisagvik College

© 2009, 288pp, Paperback, 9781428335240

ebook



Comprehensive and easy to use, the revised and updated seventh edition covers practical math problems that automotive technicians will face on the job. The easy-to-read and well organized chapters of Practical Problems in Mathematics for Automotive

Technicians, Seventh Edition feature step-by-step instructions, diagrams, charts, and examples that facilitate the problem-solving process while reinforcing key concepts. The presentation builds from the basics of whole-number operations to cover percentages, linear measurement, ratios, and the use of more advanced formulas. With a special section on graphs, scale reading of test meters, and invoices found in the workplace, this text is tailor-made for students in any automotive course of study!

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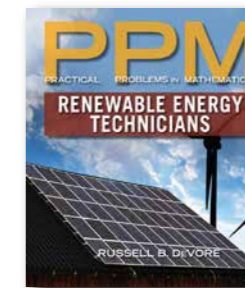
MATH FOR CONSTRUCTION TRADES

PRACTICAL PROBLEMS IN MATHEMATICS FOR RENEWABLE ENERGY TECHNICIANS

Russell B. DeVore

© 2017, 304pp, Paperback, 9781285079332

ebook



You can develop the essential quantitative skills you need to succeed in today's exciting, growing field of renewable energy, no matter what your current level of math skills, with DeVore's helpful PRACTICAL PROBLEMS IN MATHEMATICS FOR

RENEWABLE ENERGY TECHNICIANS. This book presents important math concepts in short, easily understood units. The author clearly illustrates every concept with examples and practice problems drawn from the types of tasks that you will perform on the job every day. Loaded with helpful visual features and study aids, PRACTICAL PROBLEMS IN MATHEMATICS FOR RENEWABLE ENERGY TECHNICIANS puts key information at your fingertips with critical formula conversion charts, a glossary of the latest renewable energy terms, and plenty of exercise problems specifically designed to help you strengthen and develop confidence in your math skills.

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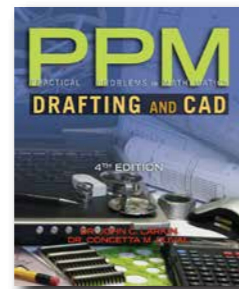
SECTION III: DECIMAL FRACTIONS. 11. Addition of Decimal Fractions. 12. Subtraction of Decimal Fractions. 13. Multiplication of Decimal Fractions. 14. Division of Decimal Fractions. 15. Decimal and Common Fraction Equivalents. 16. Combined Operations with Decimal Fractions. SECTION IV: AVERAGES, RATIO AND PROPORTION. 17. Averages. 18. Ratio. 19. Proportion. SECTION V: PERCENT, DISCOUNT, MARKUP AND EFFICIENCY. 20. Percentage. 21. Discount and Markup. 22. Efficiency. Section VI: Direct Measure. 23. Equivalent Units of Temperature Measure. 24. Angular Measure. 25. Units of Length Measure. 26. Equivalent Units of Length Measure. 27. Equivalent Units of Additional Direct Measure. SECTION VII: COMPUTED MEASURE. 28. Length Measure. 29. Area Measure. 30. Volume Measure. 31. Equivalent Units of Area and Volume Measure. SECTION VIII: FORMULAS. 32. Electrical Relationships I Ohm's Law and Equivalent Resistances and Capacitances. 33. Electrical Relationships II Power. 34. Heat Transport. 35. Energy. SECTION IX: TRIGONOMETRY. 36. Trigonometric Functions. SECTION X: GRAPHS. 37. Graphs and Graphing. SECTION XI: BILLS. 38. Estimates and Bills. Appendix.

PRACTICAL PROBLEMS IN MATHEMATICS FOR DRAFTING AND CAD, 4E

John Larkin; Concetta Duval

© 2013, 352pp, Paperback, 97811111316808

ebook



Designed to enhance your math skills in the field of drafting, this completely updated fourth edition of Practical Problems in Mathematics For Drafting and CAD presents a comprehensive overview of contemporary drafting problems, CAD drawings, and industry applications and practices. This text provides a variety of integrated math problems and CAD operations in order to facilitate critical thinking, problem solving, and basic mathematics literacy. Filled with real-world applications and designed to cover a range of skills and levels of difficulty, the fourth edition includes updated figures, illustrations, problem sets, examples, and solutions in order to give you the skills you need to succeed in the field of drafting.

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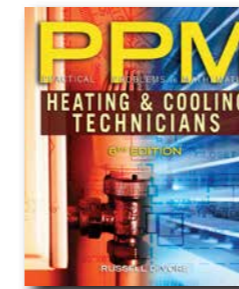
1. Whole Numbers. 2. Fractions. 3. Decimals. 4. Decimals, Fractions, and Percents. 5. Geometry Fundamentals. 6. Measurement. 7. Algebra. 8. Applied Trigonometry. 9. Geometric Dimensioning and Tolerancing.

PRACTICAL PROBLEMS IN MATHEMATICS FOR HEATING AND COOLING TECHNICIANS, 6E

Russell B. DeVore

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Practical Problems for Heating And Cooling Technicians, 6th Edition gives you the essential quantitative skills to get ahead in the HVAC field today! This text condenses critical mathematical theories into short, easily understood sections, and illustrates every concept with multiple examples and practice problems drawn from tasks technicians perform on the job every day. Loaded with helpful visual features and study aids, Practical Problems for Heating And Cooling Technicians, 6th Edition puts key information at your fingertips with critical formula conversion charts, a glossary of the latest HVAC-specific terms, hands-on exercises, and optional supplemental tools designed to build your skills and confidence.

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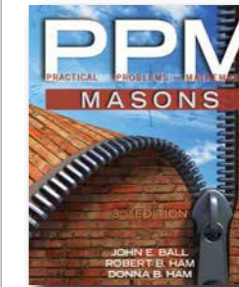
1. Whole Numbers. 2. Common Fractions. 3. Decimal Fractions. 4. Ratio and Proportion. 5. Percent, Percentage, and Discount. 6. Direct Measure. 7. Computed Measure. 8. Formulas. 9. Stretchouts and Lengths of Arcs. 10. Trigonometry. 11. Graphs. 12. Bills.

PRACTICAL PROBLEMS IN MATHEMATICS FOR MASONS, 3E

John Ball; Robert Benjamin Ham; Donna B. Ham, Blue Ridge Community College

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Newly revised for the 3rd Edition, PRACTICAL PROBLEMS IN MATHEMATICS FOR MASONS provides the quantitative skills you need for success in the workplace. Starting with the basics, this practical worktext uses straightforward language and clear organization to develop confidence quickly with helpful hints. This book guides you through the math most commonly used in masonry reinforcing your knowledge of key math principles from whole numbers and decimals to fractions and percentages. Next, step-by-step discussions of volume, area, square roots, and the Pythagorean Theorem provide the foundation masons need to properly measure projects, align walls, and estimate quantities of materials. Throughout PRACTICAL PROBLEMS IN MATHEMATICS FOR MASONS, 3RD Edition many examples, illustrations, and practice word problems help develop logical reasoning skills while developing your awareness of basic masonry terms and practices.

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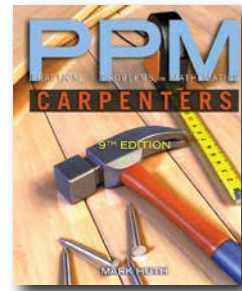
Preface. Using a Hand-Held Calculator. 1. Whole Numbers. 2. Common Fractions. 3. Decimals. 4. Percentages, Interest, Averages, and Proportions. 5. Powers and Roots. 6. Measure. 7. Computing Geometric Measure and Shapes. 8. Formulas to Align Masonry Walls. 9. Materials Estimation. Appendix. Glossary. Answers to Odd-Numbered Questions.

PRACTICAL PROBLEMS IN MATHEMATICS FOR CARPENTERS, 9E

Mark Huth

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Take command of any building and carpentry project with the robust, construction-specific math skills you will get from the 9th Edition of PRACTICAL PROBLEMS IN MATHEMATICS FOR CARPENTERS. Divided into short units, this

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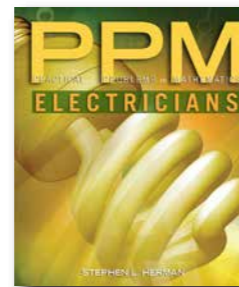
21. Square Measure. 22. Surface measurement: Triangles. 23. The Framing Square. 24. Surface Measurement: Irregular Figures. 25. Surface Measurement: Circles. 26. Volume Measurement: Cubes and Rectangular Solids. 27. Board Measure. 28. Volume Measurement. 29. Weight Measure. Section VI: POWERS AND ROOTS. 30. Applications of Exponents in Formulas. 31. Using Square Root to Find Sides of Right Triangles.

PRACTICAL PROBLEMS IN MATHEMATICS FOR ELECTRICIANS, 9E

Stephen L. Herman, Lee College (retired)

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PRACTICAL PROBLEMS IN MATHEMATICS FOR ELECTRICIANS, 9E will give you the math skills you need to succeed in the electrical trade. It introduces you to the important math principles through problems designed for the electrical profession and offers you

an excellent opportunity to develop and practice problem-solving skills while at the same time providing a valuable review of electrical terminology. This new edition uses the same straightforward writing style and simple, step-by-step explanations that made previous editions so reader-friendly. It minimizes theory and emphasizes problem-solving techniques and practice problems. This new edition also includes updated illustrations and information for a better learning experience than ever before! The book begins with basic arithmetic and then, once these basic topics have been mastered, progresses to algebra and concludes with trigonometry. Practical problems with real-world scenarios from the electrical field are used throughout, allowing you to apply key mathematical concepts while developing an awareness of basic

electrical terms and practices. This is the perfect resource for students entering the electrical industry, or those simply looking to brush up on the necessary math.

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1. Addition of Whole Numbers. 2. Subtraction of Whole Numbers. 3. Multiplication of Whole Numbers. 4. Division of Whole Numbers. 5. Combined Operations with Whole Numbers. 6. Addition of Common Fractions. 7. Subtraction of Common Fractions. 8. Multiplication of Common Fractions. 9. Division of Common Fractions. 10. Combined Operations with Common Fractions. 11. Addition of Decimal Fractions. 12. Subtractions of Decimal Fractions. 13. Multiplications of Decimal Fractions. 14. Division of Decimal Fractions. 15. Decimal and Common Fraction Equivalents. 16. Combined Operations with Decimal Fractions. 17. Percent and Percentage. 18. Interest. 19. Discount. 20. Averages and Estimates. 21. Combined Problems on Percents, Averages, and Estimates. 22. Power. 23. Roots. 24. Combined Operations with Powers and Roots. 25. Metric Measure and Scientific Notation. 26. Length Measure. 27. Area Measure. 28. Volume and Mass Measure. 29. Energy and Temperature Measure. 30. Combined Problems on Measure. 31. Ratio. 32. Proportion. 33. Combined Operations with Ratio And Proportion. 34. Representations in Formulas. 35. Rearrangement in Formulas. 36. General Simple Formulas. 37. Ohms Law Formulas. 38. Power Formulas. 39. Combined Problems on Formulas. 40. Right Triangles. 41. Trigonometric Functions. 42. Plane Vectors. 43. Rotating Vectors. 44. Combined Problems in Trigonometry. 45. Number Systems.

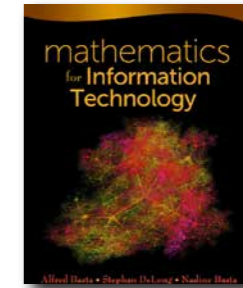
MATH FOR ELECTRONICS

MATHEMATICS FOR INFORMATION TECHNOLOGY

Alfred Basta; Stephan DeLong; Nadine Basta

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MATHEMATICS FOR INFORMATION TECHNOLOGY delivers easy-to-understand and balanced mathematical instruction. Each chapter begins with an application, goes on to present the material with examples, and closes with a summary of

the relevant concepts and practice exercises. With numerous illustrations included, you'll be able to understand the content from a number of different angles. Whether you're majoring in electronics, computer programming, or information technology, you'll find Mathematics for Information Technology to be a valuable resource

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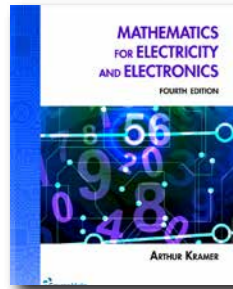
1. Sets. 2. Logic. 3. Binary and Other Number Systems. 4. Straight Line Equations and Graphs. 5. Solving Systems of Linear Equations Algebraically and with Matrices. 6. Sequences and Series. 7. Right Triangle Geometry and Trigonometry. 8. Trigonometric Identities. 9. The Complex Numbers. 10. Vectors. 11. Exponential and Logarithmic Equations. 12. Probability. 13. Statistics. 14. Graph Theory. Appendix: Answers to Odd-Numbered Exercises

MATH FOR ELECTRICITY & ELECTRONICS, 4E

Dr. Arthur Kramer, New York City College of Technology

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With its fresh reader-friendly design, **MATHEMATICS FOR ELECTRICITY AND ELECTRONICS, 4E** is more current, comprehensive, and relevant than ever before. Packed with practical exercises and examples, it equips you with a thorough understanding

of essential algebra and trigonometry for electricity and electronics technology--while helping you improve critical thinking skills. Well-illustrated information sharpens your ability to think quantitatively, predict results, and troubleshoot effectively, while relevant practice problems strengthen your understanding. To ensure mastery of the latest ideas and technology, the text thoroughly explains all mathematical concepts, symbols, and formulas that future technicians and technologists need. In addition, a new homework solution offers a wealth of online resources to maximize your study efforts!

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MATH FOR HEALTH CAREERS

MATH FOR HEALTH CARE PROFESSIONALS, 2E

Michael Kennamer, Northeast Alabama Community College; Kennamer Media Group, Inc.

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Requiring no prior knowledge of mathematics or health care, **MATH FOR HEALTH CARE PROFESSIONALS, 2E** is a comprehensive, foundational resource that is equally effective in the classroom or for self-study. It emphasizes the

fundamentals of mathematics while giving you plenty of experience applying that to real-world practice. Actual health professionals also share how they use math in their careers. Exercises using drug dosages, intake and output, weights and measures, temperatures, IV drip rates, , illustrations of syringes, prescriptions, medication labels, IV bags, and I and O charts give you hands-on practice with real-life health care skills requiring mathematics. A student workbook and MindTap digital learning solution are also available. The Second Edition includes all-new chapters devoted to pre-algebra and geometry as well as statistics. It also offers new coverage of body mass index, 24-hour time, calculating the volume of containers of various shapes, and more.

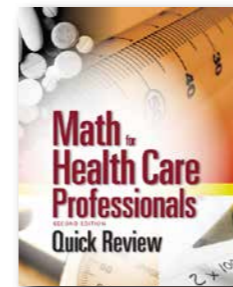
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QUICK REVIEW: MATH FOR HEALTH CARE PROFESSIONALS, 2E

Michael Kennamer, Northeast Alabama Community College; Kennamer Media Group, Inc.

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Written by a health care professional for health care professionals, **QUICK REVIEW: MATH FOR HEALTH CARE PROFESSIONALS, 2e** is perfect for anyone needing a refresher on math concepts used in health care. It thoroughly explains

the “why” along with the fundamentals of health-related math. Each chapter includes a quick review of concepts as well as numerous exercises to help you put what you learn into practice. The text emphasizes drug dosages, intake and output, weights and measures, temperatures, IV drip rates, conversions, and other real-world math applications. Detailed illustrations of syringes, prescriptions, medication labels, IV bags, and I and O charts prepare you for what you will experience on the job. In addition, MindTap offers a wealth of online

activities and resources to help you maximize your success.

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PRACTICAL PROBLEMS IN MATH FOR HEALTH SCIENCE CAREERS, 3E

Louise Simmers; Karen Simmers-Nartker; Sharon Simmers-Kobelak

© 2013, 368pp, Paperback, 9781111540388

ebook



PRACTICAL PROBLEMS IN MATHEMATICS FOR HEALTH SCIENCE CAREERS, 3RD EDITION familiarizes you with essential math processes using real-life examples and straightforward instruction. Using a word problem format, this text starts you

off with simple examples, and then progresses to complex paradigms at a comfortable pace. Plus, it focuses on the mathematical situations that you're likely to encounter in the health care field, including problems involving medications, intravenous solutions, and other emulsions. No matter which area of Allied Health you're interested in, updated and expanded Practical Problems In Mathematics For Health Science Careers, 3rd Edition is the resource you'll use for years to come.

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1. Whole Numbers.
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8. Graphs and Charts.
9. Accounting and Business.
10. Math for Medications.
11. Introduction to Health Occupations.

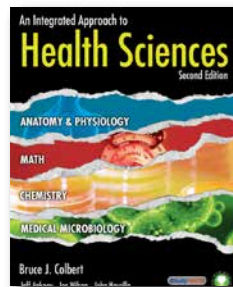
AN INTEGRATED APPROACH TO HEALTH SCIENCES, 2E

Anatomy and Physiology, Math, Chemistry and Medical Microbiology

Bruce J. Colbert, University of Pittsburgh at Johnstown; Jeff Ankney; Joe Wilson; John Havrilla

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Unlike any other resource on the market, AN INTEGRATED APPROACH TO HEALTH SCIENCES, 2E takes an all-in-one approach to preparing learners for careers in the health care industry. The book identifies the four basic building blocks of

Health Sciences: anatomy and physiology, math, chemistry, and medical microbiology, and then presents them in the context of health professions. Medical terminology and physics concepts are also covered. Rich illustrations, theory, practical applications, and humorous anecdotes all join together to help learners connect with the material as they learn it, fostering increased retention and comprehension. As a result, learners will gain valuable knowledge while also getting access to an insider look at health careers through the book's professional profiles. Exercises and case studies complement the comprehensive coverage and sharpen critical thinking skills, making this a complete package for anyone aiming to develop a solid foundational knowledge in the health sciences.

And although the textbook can stand alone, it has capabilities for enhancements with a rich array of extra resources that include videos, animations, interactive games, study questions and a workbook with activities.

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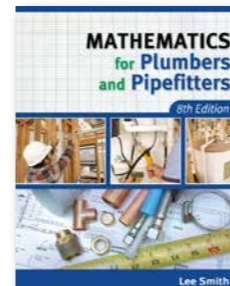
MATH FOR PLUMBERS

MATHEMATICS FOR PLUMBERS AND PIPEFITTERS, 8E

Lee Smith

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Now in its 8th edition, MATHEMATICS FOR PLUMBERS AND PIPEFITTERS delivers the essential math skills necessary in the plumbing and pipefitting professions. Starting with a thorough math review to ensure a solid foundation, the book

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1. Review of Fundamentals.
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4. Volumes, Pressures, Capacities.
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7. The Builder's Level.
8. The Business of Plumbing.

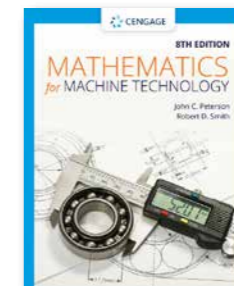
MATH FOR TECHNOLOGY

MATHEMATICS FOR MACHINE TECHNOLOGY, 8E

John C. Peterson, Chattanooga State Technical Community College; Robert D. Smith, Chattanooga State Technical Community College (retired)

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Strengthen mathematical skills and gain practice using those skills in preparation for success in machine trades or manufacturing with Peterson/Smith's MATHEMATICS FOR MACHINE TECHNOLOGY, 8E. This comprehensive

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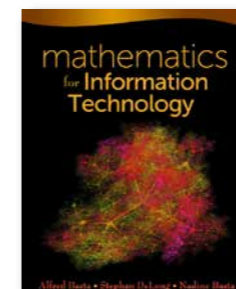
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MATHEMATICS FOR INFORMATION TECHNOLOGY

Alfred Basta; Stephan DeLong; Nadine Basta

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MATHEMATICS FOR INFORMATION TECHNOLOGY delivers easy-to-understand and balanced mathematical instruction. Each chapter begins with an application, goes on to present the material with examples, and closes with a summary of

the relevant concepts and practice exercises. With numerous illustrations included, you'll be able to understand the content from a number of different angles. Whether you're majoring in electronics, computer programming, or information technology, you'll find Mathematics for Information Technology to be a valuable resource

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9. The Complex Numbers.
10. Vectors.
11. Exponential and Logarithmic Equations.
12. Probability.
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14. Graph

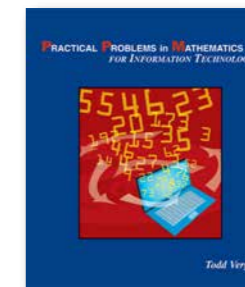
Theory. Appendix: Answers to Odd-Numbered Exercises

PRACTICAL PROBLEMS IN MATHEMATICS FOR INFORMATION TECHNOLOGY

Todd Verge

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Create a new approach to explaining the math and logic fundamentals required in the information technology industry. Practical Problems in Mathematics for Information Technology is an exciting new resource for building a solid foundation in the mathematical skills

that are used in a number of areas, such as networking, systems administration, programming, database management, web programming, and computer repair. By presenting examples, problems, and exercises that are taken directly from these concentration areas, readers will not only build their mathematical know-how, but they will achieve the added benefit of being fully prepared for the types of challenges they are likely to encounter on the job. Real-world examples from the industry are included throughout this new book.

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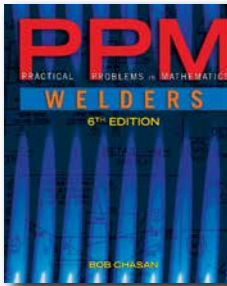
MATH FOR WELDERS

PRACTICAL PROBLEMS IN MATHEMATICS FOR WELDERS, 6E

Robert Chasan, Gateway Community College

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Discover how this highly effective, practical approach to mathematics can prepare you with the math skills most important for success in today's welding careers. PRACTICAL PROBLEMS IN MATHEMATICS FOR WELDERS, 6E combines an inviting, comprehensive

introduction to math with an emphasis on the latest procedures, practices, and technologies in today's welding industry. You'll see how welders rely on mathematical skills to solve both everyday and more challenging problems, from measuring materials for cutting and assembling to effectively and economically ordering materials. Highly readable, inviting units emphasize both basic procedures and more advanced mathematics formulas welders must regularly use. Clear, uncomplicated explanations, new practice problems, and real-world examples emphasize some of the industry's latest developments. New, more dimensional illustrations throughout this edition help you further visualize concepts with an approach that's ideal for learners at all levels of math proficiency. A new homework solution and dynamic online website help reinforce the math skills most important for success in welding today.

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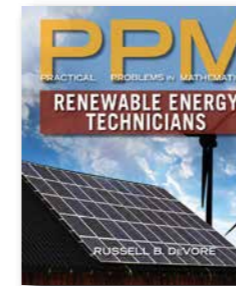
TECHNICAL MATHEMATICS

PRACTICAL PROBLEMS IN MATHEMATICS FOR RENEWABLE ENERGY TECHNICIANS

Russell B. DeVore

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You can develop the essential quantitative skills you need to succeed in today's exciting, growing field of renewable energy, no matter what your current level of math skills, with DeVore's helpful PRACTICAL PROBLEMS IN MATHEMATICS FOR

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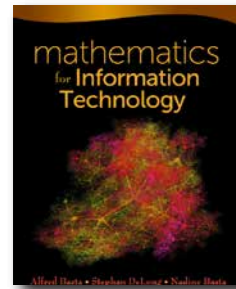
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Alfred Basta; Stephan DeLong; Nadine Basta

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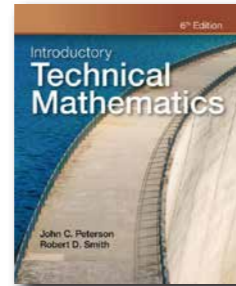
1. Sets. 2. Logic. 3. Binary and Other Number Systems. 4. Straight Line Equations and Graphs. 5. Solving Systems of Linear Equations Algebraically and with Matrices. 6. Sequences and Series. 7. Right Triangle Geometry and Trigonometry. 8. Trigonometric Identities. 9. The Complex Numbers. 10. Vectors. 11. Exponential and Logarithmic Equations. 12. Probability. 13. Statistics. 14. Graph Theory. Appendix: Answers to Odd-Numbered Exercises

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John Peterson, Chattanooga State Technical Community College (retired); Robert D. Smith, Chattanooga State Technical Community College (retired)

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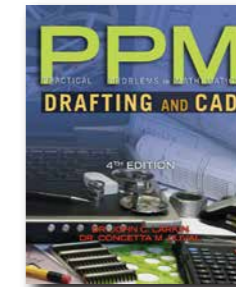
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PRACTICAL PROBLEMS IN MATHEMATICS FOR DRAFTING AND CAD, 4E

John Larkin; Concetta Duval

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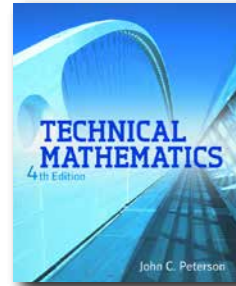
1. Whole Numbers. 2. Fractions. 3. Decimals. 4. Decimals, Fractions, and Percents. 5. Geometry Fundamentals. 6. Measurement. 7. Algebra. 8. Applied Trigonometry. 9. Geometric Dimensioning and Tolerancing.

TECHNICAL MATHEMATICS, 4E

John C. Peterson, Chattanooga State Technical Community College

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TECHNICAL MATHEMATICS provides a thorough review of pre calculus topics ranging from algebra and geometry to trigonometry and analytic geometry, with a strong emphasis on their applications in specific occupations. The text's

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Preface. 1. The Real Number System. 2. Algebraic Concepts and Operations of Equations. 3. Geometry. 4. Functions and Graphs. 5. An Introduction to Trigonometry and Variation. 6. Systems of Linear Equations and Determinants. 7. Factoring and Algebraic Fractions. 8. Vectors and Trigonometric Functions. 9. Fractional and Quadratic Equations. 10. Graphs of Trigonometric Functions.

11. Exponents and Radicals. 12. Exponential and Logarithmic Functions. 13. Statistics and Empirical Methods. 14. Complex Numbers. 15. An Introduction to Plane Analytic Geometry. 16. Computer Number Systems. 17. Higher Degree Equations. 18. Systems of Equations and Inequalities. 19. Matrices. 20. Sequences, Series, and the Binomial Formula. 21. Trigonometric Formulas, Identities, and Equations. 22. An Introduction to Calculus. Appendix A: The Metric System. Appendix B: Table of Integrals Answers to Odd-Numbered Exercises Index of Applications. Index. The following chapters are available in CourseMate: 23. The Derivative 24. Applications of Derivatives 25. Integration 26. Applications of Integration 27. Derivatives of Transcendental Functions 28. Techniques of Integration 29. Parametric Equations, Vectors, and Polar Coordinates 30. Partial Derivatives and Multiple Integrals 31. Infinite Series 32. First-Order Differential Equations 33. Higher-Order Differential Equations 34. Numerical Methods and LaPlace Transforms.

BUILDING TRADES/ CONSTRUCTION

BLUEPRINT READING & SKETCHING

PRINT READING FOR MACHINISTS, 6E

David L. Taylor

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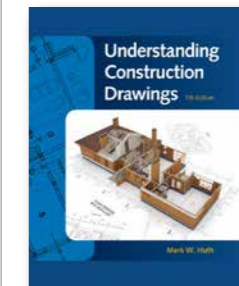
Keyseats. 17. Dimensioning Arcs and Radii. 18. Hole Patterns and Revision Blocks. 19. Angles, Dovetails, and Slots. 20. Metric Dimensions and Tolerances. 21. Machining Symbols, Bosses, and Pads. 22. Surface Texture. 23. Tapers and Chamfers. 24. Undercuts and Knurling. 25. Screw Thread Specifications. 26. Screw Thread Representation and Threaded Fasteners. 27. Pipe Threads. 28. Assembly Drawings. 29. Welding Symbols. 30. Geometric Tolerances – Datums. 31. Geometric Tolerances - Location and Form. Appendix. INDEX.

UNDERSTANDING CONSTRUCTION DRAWINGS, 7E

Mark W. Huth

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This proven, uniquely practical text provides your students with a thorough guide to reading, understanding, and working with construction drawings. Now updated to reflect the 2015 International Building Code® and 2015 International Residential

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and reinforced concrete. In addition to updates related to 2015 codes, the text features an all-new unit covering multi-building developments, fire code and sound control measures, and seismic considerations, with new drawings for a four-story, two-family building in an urban, seismic-sensitive area.

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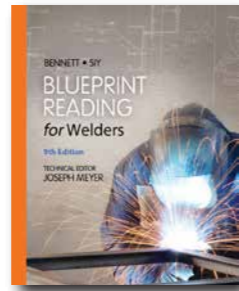
Preface. Part 1: DRAWINGS: TWO-UNIT APARTMENT. 1. The Design-Construction Sequence and the Design Professions. 2. Views. 3. Scales. 4. Alphabet of Lines. 5. Use of Symbols. 6. Plan Views. 7. Elevations. 8. Sections and Details. Part 1 Test. Part 2: READING DRAWINGS FOR TRADE INFORMATION: LAKE HOUSE. 9. Clearing and Rough Grading the Site. 10. Locating the Building. 11. Site Utilities. 12. Footings. 13. Foundation Walls. 14. Drainage, Insulation, and Concrete Slabs. 15. Framing Systems. 16. Columns, Piers, and Girders. 17. Floor Framing. 18. Laying Out Walls and Partitions. 19. Framing Openings in Walls. 20. Roof Construction Terms. 21. Roof Trusses. 22. Common Rafters. 23. Hip and Valley Framing. 24. Cornices. 25. Windows and Doors. 26. Exterior Wall Coverings. 27. Decks. 28. Finishing Site Work. 29. Fireplaces. 30. Stairs. 31. Insulation and Room Finishing. 32. Cabinets. 33. Lake House Specifications. Part 2 Test. Part 3: MULTIFAMILY CONSTRUCTION: URBAN COURTS. 34. Orienting the Drawings. 35. Fire-Rated and Acoustical Considerations. 36. Seismic Considerations. Part 3 Test. Part 4: HEAVY COMMERCIAL CONSTRUCTION: SCHOOL ADDITION. 37. Heavy Commercial Construction. 38. Coordination of Drawings. 39. Structural Drawings. 40. HVAC & Plumbing Drawings. 41. Electrical Drawings. Part 4 Test. Appendix A: Math Reviews. Appendix B: Material Symbols in Sections. Appendix C: Plumbing Symbols. Appendix D: Electrical Symbols. Appendix E: Abbreviations. Glossary. Index.

BLUEPRINT READING FOR WELDERS, SPIRAL BOUND VERSION, 9E

A.E. Bennett; Louis J. Sij

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This hands-on, reader-friendly guide provides comprehensive, up-to-date coverage of welding symbols and their application to welding prints and practices. BLUEPRINT READING FOR WELDERS, Ninth Edition, uses step-by-step instructions and

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BLUEPRINTS AND PLANS FOR HVAC, 4E

Joseph Moravek, Nance Universal HVACR Technical School, Beaumont, Texas; Curtis McGuirt, Nance International, Beaumont, Texas; Wilma B. Miller, Worcester Polytechnic Institute

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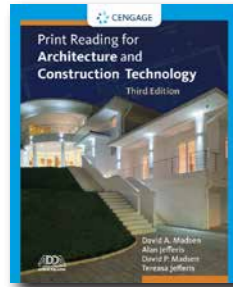
1. Review of Basic Mathematical Procedures. 2. Safety. 3. Linear Measurements. 4. Angular Measurements. 5. Learning to Use the Architect's Scale. 6. Learning to Use the Engineer's Scale. 7. Symbols and Abbreviations. 8. How Working Drawings are Created. 9. Categories of Working Drawings. 10. Sections, Elevations and Details. 11. Creating Construction Drawings. 12. Who Uses Construction Drawings. 13. Specifications. 14. Title Blocks. 15. Types and Weights of Lines. 16. Orthographic Projection. 17. Oblique Drawings. 18. Isometric Drawings. 19. Lettering and Notations. 20. Organizing a Drawing Sheet. 21. Shading and Crosshatching. 22. Drawing Construction Elevations. 23. Drawing Construction Details. 24. Freehand Sketching. 25. Drafting with Instruments. 26. Reading Architectural Plans. 27. Ductwork Plans. 28. Reading Mechanical Plans. 29. Reading Electrical Plans. 30. Reading Plumbing Plans. 31. Current Technology. 32. Introduction to Load Calculations. 33. Appendices. 34. Glossary. 35. Index.

PRINT READING FOR ARCHITECTURE AND CONSTRUCTION TECHNOLOGY, 3E

David A Madsen; Alan Jefferis, Clackamas Community College;
David P. Madsen; Tereasa Jefferis, Mt. Hood Community College

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PRINT READING FOR ARCHITECTURE AND CONSTRUCTION TECHNOLOGY, 3E provides the knowledge and skills needed to accurately interpret blueprints for residential and light commercial construction.

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David A Madsen

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PRINT READING FOR ENGINEERING AND MANUFACTURING TECHNOLOGY 3E takes a practical approach to print reading, with fundamental through advanced coverage that demonstrates industry standards essential for pursuing careers in the 21st

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BASIC BLUEPRINT READING AND SKETCHING, 9E

Thomas P. Olivo; C. Thomas Olivo

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For over 50 years, Basic Blueprint Reading and Sketching has been an international best-seller, with close to \$500,000 in sales and THE definitive resource for blueprint reading. The newly revised 9th edition of Basic Blueprint Reading and Sketching

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BLUEPRINT READING AND DRAFTING FOR PLUMBERS, 2E

Michael A. Joyce

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With a one-of-a-kind approach that offers more comprehensive coverage than any other plumbing apprentice book on the market, this valuable resource will thoroughly prepare readers for the transition from the residential plumbing

industry to commercial or industrial projects. *Blueprint Reading and Drafting for Plumbers, 2E* goes beyond basic lessons on reading and drafting various piping arrangements to provide highly detailed, practical, and relevant information that addresses the real-life demands of commercial and industrial job sites. This updated edition features all-new chapters devoted to coordinating plumbing installations using structural steel and civil blueprints, further enhancing the book's unique and jobsite-focused classroom lessons.

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Appendix A: Abbreviations and Mathematical Tables
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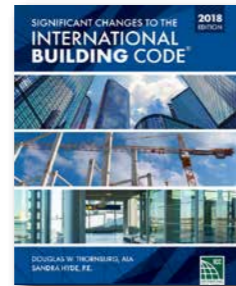
BUILDING CODES

SIGNIFICANT CHANGES TO THE INTERNATIONAL BUILDING CODE 2018 EDITION, 2E

International Code Council (ICC)

© 2018, 352pp, Paperback, 9781337271202

ebook



This convenient, easy-to-use resource provides a comprehensive analysis of notable changes since the 2015 International Building Code®, including the origins, implications, and real-world applications of those changes. Covering updates to both structural and non-

structural provisions of the IBC®, the text presents an analysis of affected code sections, highlighting modifications to the existing language with strikethroughs and underlines. Each update also features a brief explanation, detailed illustrations, and thoughtful discussion of the changes' significance, so you can interpret the code's technical jargon and understand its practical applications to real-world scenarios. With its attention to detail, logical organization, and thorough, yet concise coverage, *SIGNIFICANT CHANGES TO THE INTERNATIONAL BUILDING CODE®, 2018 Edition*, is an ideal resource to help you transition from the 2015 IBC.

CONTENTS

1. Administration – Chapters 1 and 2. 2. Building Planning – Chapters 3 through 6. 3. Fire Protection – Chapters 7 through 9. 4. Means of Egress – Chapter 10. 5. Accessibility – Chapter 11. 6. Building Envelope, Structural Systems, and Construction Materials – Chapters 12 through 26. 7. Building Services, Special Devices, and Special Conditions – Chapters 27 through 34.

SIGNIFICANT CHANGES TO THE INTERNATIONAL RESIDENTIAL CODE 2018 EDITION, 2E

International Code Council (ICC)

© 2018, 352pp, Paperback, 9781337271332

ebook



This convenient, easy-to-use resource provides a comprehensive analysis of notable changes since the 2015 International Residential Code®, including the origins, implications, and real-world applications of those changes. Covering updates to building, energy,

mechanical, fuel gas, plumbing, and electrical provisions of the IRC®, the text presents an analysis of affected code sections, highlighting modifications to the existing language with strikethroughs and underlines. Each update also features a brief explanation, detailed illustrations, and thoughtful discussion of the changes' significance, so you can interpret the code's technical jargon and understand its practical applications to real-world scenarios. With its attention to detail, logical organization, and thorough, yet concise coverage, *SIGNIFICANT CHANGES TO THE INTERNATIONAL RESIDENTIAL CODE®, 2018 Edition*, is an ideal resource to help you transition from the 2015 IRC.

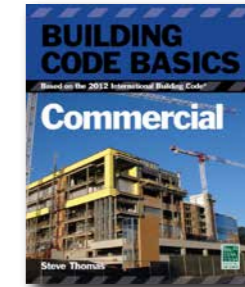
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1. Administration – Chapters 1 and 2. 2. Building Planning – Chapter 3. 3. Building Construction – Chapters 4 through 10. 4. Energy Conservation – Chapter 11. 5. Mechanical – Chapters 12 through 23. 6. Fuel Gas – Chapter 24. 7. Plumbing – Chapters 25 through 33. 8. Electrical – Chapters 34 through 43. 9. Appendices – Appendix A through S.

BUILDING CODE BASICS, 2E

Commercial; Based on the International Building Code
International Code Council (ICC)

© 2013, 224pp, Paperback, 9781133283355



When you are looking for an introduction to the International Building Code® (IBC®), look for a resource that was designed especially for you – look for *BUILDING CODE BASICS*. Aimed at first-time users of the Code, the book explores its base requirements in a

straightforward, easy-to-read format. From technical jargon to the IBC's more complex regulations, it simplifies critical concepts so that students can begin to build a foundation for learning and applying the Code. This valuable guide is based on the 2012 edition of the IBC, making it an up-to-date, step-by-step guide to understanding and applying its provisions. Check out our app, *DEWALT® Mobile Pro™*. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

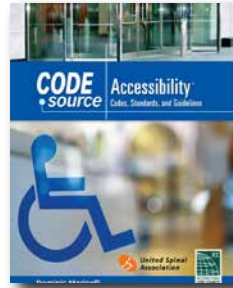
CODE SOURCE ACCESSIBILITY

Codes, Standards, and Guidelines

International Code Council (ICC); Dominic Marinelli

© 2012, 96pp, Spiral, 9781111037246

ebook



With a single resource, you can learn to translate key state and federal accessibility requirements into clear, easy-to-understand and easy-to-apply explanations. It's all contained in CODE SOURCE ACCESSIBILITY: CODES, STANDARDS,

AND GUIDELINES, the groundbreaking resource that explores the accessibility requirements that apply to commercial, residential, and existing buildings. The book focuses on four major industry publications: the International Building Code® (IBC®) and its accessibility reference standard A117.1 – 2003, the Revised Americans with Disabilities Act/ Architectural Barriers Act Accessibility Guidelines (ADAAG 2004), and the Federal Fair Housing Act's Accessibility Guidelines (FH Act). Working in agreement with one another, the standards set forth by these documents serve as the guiding principles for the construction of code-compliant buildings, and CODE SOURCE ACCESSIBILITY: CODES, STANDARDS, AND GUIDELINES is the perfect collection of their most critical provisions. Not intended to replace the full state and federal accessibility requirements, this concise yet thorough resource will help students to learn and quickly reference basic code-compliant accessibility standards for people with disabilities. It will also help readers to avoid the future pitfalls of not adhering to the standards, such as costly litigation and retrofitting, making it a tool they won't want to be without. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

SIGNIFICANT CHANGES TO THE A117.1 ACCESSIBILITY STANDARD 2009 Edition

Jay Woodward; Kim Paarlberg

© 2011, 100pp, Paperback, 9781435498983



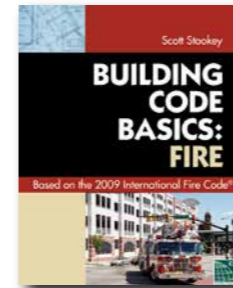
When it comes to learning the very latest accessibility standards, there is no better tool than Significant Changes to the 2009 Accessibility Standard. This one-of-a-kind resource identifies significant changes in the 2009 edition of the ICC A117.1 standard

and the accessibility items in the 2009 International Building Code®, and provides the reason and rationale behind those changes. Essential for an easy transition between code updates, the book's value lies in its focus, which is aimed at the most critical provisions, the most frequently used provisions, and provisions that have had a significant change in application, so that students can readily identify the need-to-know information. Each change is accompanied by a photograph, a real-world example, or an illustration, and is followed by a summary and analysis. Further enhancing this key content is the clear and deliberate labeling of each change as an addition, modification, clarification, or deletion. The end result is an indispensable resource that will familiarize students pursuing careers in the construction industry with the many important accessibility-related changes that have materialized in the 2009 and 2012 International Building Codes and the 2009 A117.1 standard. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

CODE BASICS SERIES: 2009 INTERNATIONAL FIRE CODE

International Code Council (ICC)

© 2010, 220pp, Paperback, 9781435400702



Comprehensive coverage and strong, clear connections between building- and fire-related concepts and the International Fire Code® requirements that govern them form the cornerstone of this valuable resource. The CODE BASIC BOOK

FOR THE 2009 INTERNATIONAL FIRE CODE® is designed to explore the proper application and use of the 2009 International Fire Code®, by offering detailed guidance of the basic provisions found in the Code®. It begins with a section of prerequisite reading, explaining occupancy classifications, what they are, and how they should be applied. This is critical in establishing a foundational knowledge that readers can build upon as they progress through subsequent content. The book is then divided into six logically organized sections, and covers important topics as they pertain to the Code®, including firefighter's response to buildings, fire department access to roadways, firefighter protection systems, sprinkler systems, hazards in buildings and communities, compressed gasses, combustible liquids, basic requirements for storage & use for hazardous materials, and much more. Straightforward and easy-to-read, it is an indispensable tool for fire inspectors, code officials, fire marshals, design professionals, firefighters, and anyone studying to enter these fields. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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PREFACE. About the International Fire Code. Acknowledgements. Author. PREREQUISITE READING. Part 1: CODE ADMINISTRATION AND ENFORCEMENT. 1. Introduction to Building and Fire Codes. Code Development. The Building Codes: Scope and Limitations. International Fire Code (IFC). 2. Legal Aspects, Permits and Inspections. Code Adoption. Authority. Permits. Inspections. Board of Appeals. Part 2: GENERAL SAFETY REQUIREMENTS. 3. General Precautions Against Fire. Combustible Materials. Ignition Sources. Open Flames. Vacant Premises. Indoor Displays. 4. Emergency Planning and Preparedness. Emergency Forces Notification. Public assemblies and events. Fire safety and Evacuation Plans. Emergency Evacuation Drills. Employee Training and Response. Part 3: SITE AND BUILDING SERVICES. 5. Fire Service Features. Fire Apparatus Access Roads. Access to Buildings. Hazards to Firefighters. Fire Protection Water Supplies. Emergency Responder Radio Coverage. 6. Building Systems. Fuel Fired Appliances. Emergency and Standby Power Systems. Elevator Recall and Maintenance. Commercial Kitchen Hoods. 7. Interior Finish and Decorative Materials. Purpose of the Requirements. Interior Wall and Ceiling Finish and Trim. Upholstered Furniture and Mattresses. Part 4: FIRE / LIFE SAFETY SYSTEMS AND FEATURES. 8. Requirements for All Fire Protection Systems. Purpose. When are Fire Protection Systems Required. Construction Documents and Acceptance Testing. Inspection, Testing and Maintenance. Fire Protection System Impairment. Fire Protection System Monitoring. 9. Automatic Sprinkler Systems. Level of Exit Discharge and Fire Area. Design and Installation Standards. Types of Automatic Sprinkler Systems. Occupancies Requiring Automatic Sprinkler Protection. Fire Department Connection. 10. Fire Alarm and Detection Systems. Design and Installation Standards. Fundamental Components. Occupancies Requiring Fire Alarm and Detection Systems. 11. Means of Egress. Definitions. Occupant Load. Egress Width. Number of Exits. Exit Access and Travel Distance. Exit Signs and Means of Egress Illuminations. Two-way Communications. Part 5: SPECIAL PROCESSES & BUILDING

USES. 12. Flammable Finishes. Applicability. Types of Flammable Finishing Processes. Spray Finishing. Powder Coating. 13. Motor Fuel-Dispensing Facilities and Repair Garages. Hazards Review of Conventional and Alternative Fuels. Dispensing Devices and Operations. Flammable and Combustible Liquid Dispensing. Liquefied Petroleum Gas Dispensing. Repair Garages. 14. High-Piled Combustible Storage. Applicability. Commodities. High-Piled Combustible Storage Areas. Storage Methods. Aisles. Automatic Sprinkler Systems. 15. Other Special Processes and Uses. Combustible Dust Producing Operations. Fire Safety During Construction and Demolition. Lumber Yards and Woodworking Operations. Hot Work. Part 6: HAZARDOUS MATERIALS. 16. General Requirements for Hazardous Materials. Material Classification. Hazardous Material Reporting. Storage and Use. Maximum Allowable Quantity Per Control Area. Control Areas. Hazard Identification Signs. Separation of Incompatible Materials. 17. Compressed Gases. Containers, Cylinders and Tanks. Pressure Relief Devices. Markings. Security. Valve Protection. Separation from Hazardous Conditions. Exhausted Enclosures and Gas Cabinets. Leaks, Damage or Corrosion. 18. Flammable and Combustible Liquids. Classification of Liquids. Containers, Portable Tanks and Stationary Tanks. Design and Construction of Storage Tanks. Storage Tank Openings.

HVACR 101

Joseph Moravek, Nance Universal HVACR Technical School, Beaumont, Texas

© 2009, 464pp, Paperback, 9781418066635

ebook



Designed to guide apprentices, entry-level technicians, and first-year students through their first experiences in the HVAC/R trade, HVAC 101 provides a solid and thorough introduction to the field. It is the culmination of the efforts of industry leaders like the

Air Conditioning Contractors of America (ACCA), PHCC Educational Foundation Plumbing Apprentice & Journeyman Training Committee (PHCC Educational Foundation), and Refrigeration Service Engineers Society (RSES). Backed by these organizations and the high standards and cutting-edge resources that they are known for, the book begins with simple concepts that provide an overview of the world of HVAC/R and its main systems and components. Coverage then progresses to increasingly complex procedures, such as maintenance and inspection, installation and repair, and customer service and sales. This building-block approach, combined with numerous practical examples, makes the book the ideal resource for learning and applying key HVAC/R concepts. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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Chapter 1: Welcome to the World of HVACR Chapter 2: Introduction to Systems and Major Components Chapter 3: Introduction to Basic Electricity Chapter 4: Introduction to Thermodynamics Chapter 5: Basic Refrigeration Cycle Chapter 6: Scheduled Maintenance Chapter 7: Systematic Problem Solving Chapter 8: Basic Installation and Repair

Methods Chapter 9: Energy Efficient Installations Chapter 10: Selling and Customer Service

CARPENTRY

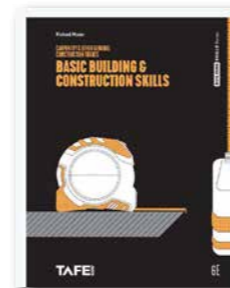
NEW EDITION

BASIC BUILDING AND CONSTRUCTION SKILLS, 6E

Richard Moran

© 2021, 400pp, Paperback, 9780170420570

CENGAGE | MINDTAP ebook



Basic Building and Construction Skills, 6e is one of four titles in the Building Skills series. It provides you with the knowledge and skills you need to work safely, efficiently and productively in the building and construction industry. The

book comes with bonus online study tools on the Student Website including glossary, web links and flashcards. The bestselling Building Skills series addresses the key competencies of Certificate III in Carpentry. You'll learn with the aid of colour photographs and illustrations, as well as online tools. Work Health and Safety (WHS) icons identify points for concern, and activities help you apply the knowledge and skills you've learned. Covers the following units of competencies CPCCWHS2001 CPCCOM1012 CPCCOM1013 CPCCOM1014 CPCCOM1015 CPCCCA3025 CPCCCA2011 CPCCCA2002 CPCCCM2006

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– Carry out measurements and calculations Unit 6 – Read and interpret plans and specifications PART 3 - USING MATERIALS AND TOOLS Unit 7 – Handle carpentry and construction materials Unit 8 – Use carpentry and construction tools and equipment PART 4 - SITE WORKS Unit 9 – Apply basic levelling

NEW EDITION

CONSTRUCTION SKILLS, 3E

Glenn Costin, Deakin University

© 2021, 336pp, Paperback, 9780170444422

ebook



Construction Skills, 3e covers important safety areas from Certificate III in Carpentry/Carpentry and Joinery, Certificate III in Plumbing and across the trades. It includes end-of-chapter worksheets, explanation and definition of terms, coverage of

regulation and codes, real-world examples and practical demonstrations. Written to competency units: CPCCCM2012 – Work safely at heights CPCCCA3027 – Powder-actuated tools CPCCCM3001 – Elevated work platforms CPCCCM2008 – Restricted height scaffolding The best-selling Building Skills series addresses the key competencies of the Certificate III in Carpentry. Series titles are built for learning with colour photographs and illustrations, online tools, and concepts explored in context to help your understanding.

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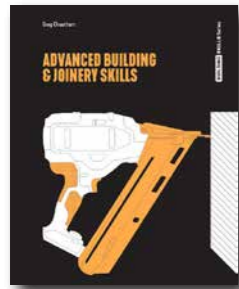
1. Working safely at heights 2. Powder-actuated tools 3. Elevating work platforms 4. Limited-height scaffolding

ADVANCED BUILDING & JOINERY SKILLS, 3E

Greg Cheetham, South Western Sydney Institute (SWSI)

© 2020, 504pp, Paperback, 9780170421867

CENGAGE | MINDTAP **ebook**



The bestselling Building Skills series addresses the key competencies of the Certificate III in Carpentry, and gives you context for important concepts to help your understanding. Colour photographs and illustrations make learning visual and interactive.

Advanced Building and Joinery Skills, 3e covers standard industry practice and combines this with information on the newest technology and tools. Work Health and Safety (WHS) icons help you identify points for concern, and activities help you apply the knowledge and skills you've learnt. Other end of chapter tools helps you to review, practice and extend your knowledge of the key learning objectives. Units of competency covered: 1. CPCCCA3019 2. CPCCCA3018 3. CPCCCA3010 4. CPCCCA3012 5. CPCCCA3024 6. CPCCCA3016 7. CPCCCA3009 8. CPCCCA3017 9. CPCCJN3004

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CONSTRUCTION TECHNOLOGY FOR BUILDERS

Glenn Costin, Deakin University

© 2020, 512pp, Paperback, 9780170416047

ebook



Building and Construction Management, 1e is a competency-based text, addressing the Certificate IV in Building and Construction. The text has practice activities and worksheets, and addresses structural principles, Codes, Standards and legal

requirements. A technical glossary is included, as well as appendices containing additional learning material. The student website that accompanies new copies of the text includes downloadable worksheets so you can practise and reinforce your learning.

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Part 1 – Codes and standards 1. Building codes and standards 2. Legal requirements for building and construction projects 3. Construction contracts 4. Work health and safety 5. Plans and specifications 6. On-site supervision 7. Business disputes Part 2 – Business preparation 8. Tender documentation 9. Small business finances Part 3 – Design considerations 10. Site surveys and set out procedures 11. Simple building sketches and drawings Part 4 – Structures 12. Structural principles 13. Applying structural principles to low-rise constructions Part 5 – Sustainability 14. Thermal efficiency and sustainability 15. Minimising waste

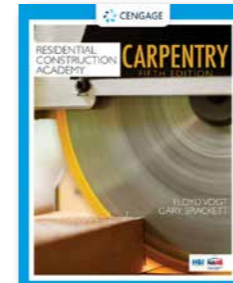
RESIDENTIAL CONSTRUCTION ACADEMY, 5E

Carpentry

Floyd Vogt, State University of New York, Delhi; Gary Brackett, State University of New York, Delhi

© 2020, 816pp, Hardback, 9781337918503

CENGAGE | MINDTAP **ebook**



Created through a partnership between Home Builders Institute (HBI) and the National Association of Home Builders (NAHB), this best-selling resource uses a visual, practical, instructional approach to teach you how to build a home and help you develop

essential skills. RESIDENTIAL CONSTRUCTION ACADEMY: CARPENTRY, Fifth Edition, provides a logical, sequential introduction to essential construction topics. Each chapter begins with learning objectives and a glossary, features relevant pictures and diagrams to reinforce key ideas, and concludes with construction procedures and review questions. Throughout the text, the authors also highlight important techniques, tools, materials, code requirements, and best practices you'll need to know as you begin your career in residential building construction.

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Part I: TOOLS AND MATERIALS. 1. Hand Tools. 2. Hand Power Tools. 3. Stationary Power Tools. 4. Wood and Wood Products. 5. Fasteners. Part II: ROUGH CARPENTRY. 6. Jobsite Safety and Construction Aids. 7. Building Plans and Codes. 8. Building Layout. 9. Concrete Form Construction. 10. Floor Framing. 11. Wall and Ceiling Framing. 12. Roof Framing. Part III: EXTERIOR FINISH. 13. Roofing. 14. Windows and Doors. 15. Siding and Decks. Part IV: INTERIOR FINISH. 16. Insulation and Ventilation. 17. Wall Finish. 18. Interior Finish. 19. Stair Framing and Finish. 20. Cabinets and Countertops.

SITE ESTABLISHMENT, FORMWORK AND FRAMING, 4E

Adrian Laws, Wagga Wagga TAFE

© 2020, 480pp, Paperback, 9780170422529

CENGAGE | MINDTAP **ebook**



Site Establishment Formwork & Framing is designed to complement your onsite learning experiences. It covers what to do with a vacant site, setting out a building on that site, and completion of the framed building with walls, roof and eaves in place.

Each chapter deals with the main events involved in the process of taking that vacant site through to the completed building. The text heavily references Australian building standards, codes and guides. The updated coverage of sustainability, materials, tools and industry benchmarks, coupled with revised end-of-section worksheets and online study tools, makes this edition the most up-to-date and comprehensive resource in the market. The bestselling Building Skills series addresses the key competencies of the Certificate III in Carpentry. Units of competencies covered: CPCCOM3006 CPCCCA3002 CPCCCM2002 CPCCCA3028 CPCCSF2004 CPCCCO2013 CPCCCA3003 CPCCCA3004 CPCCCA3005 CPCCCA3007 CPCCCA3006 CPCCCA3008 CPCCCA3014 CPCCCA3001

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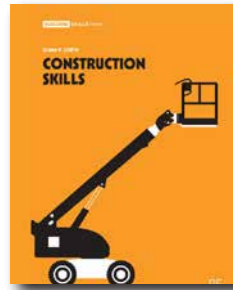
Part 1 Setting out 1 Carry out levelling procedures and operations 2 Carry out setting out Part 2 Footings 3 Carry out excavation 4 Erect and dismantle formwork for footings and slabs-on-ground 5 Place and fix reinforcement materials 6 Carry out concreting to simple forms Part 3 Framing 7 Install flooring systems 8 Construct wall frames 9 Construct ceiling frames 10 Construct pitched roofs 11 Erect roof trusses 12 Construct eaves 13 Construct bulkheads Part 4 Demolition 14 Carry out general demolition of minor building structures

CONSTRUCTION SKILLS, 2E

Glenn Costin, Deakin University

© 2017, 240pp, Paperback, 9780170376709

ebook



New tradies, learn to stay safe with comprehensive coverage of the technical and regulatory changes that you need to know about working safely at heights, on scaffolding and elevated work platforms, and with powder-actuated tools. Construction Skills 2e is

designed for easy learning with end-of-chapter worksheets, explanation and definition of terms, coverage of regulation and codes, real-world examples and practical demonstrations. The author covers core units and important safety areas from Certificate III in Carpentry/Carpentry and Joinery, Certificate III in Plumbing and across the trades. Written to competency units: - CPCCCM2010: Work safely on scaffolding higher than two metres - CPCPCM2055A: Work safely on roofs - CPCCCM2007B: Use explosive power tools - CPCCCM3001: Operate elevated work platforms up to 11 metres - CPCCCM2008B: Erect and dismantle restricted height scaffolding The bestselling Building Skills series addresses the key competencies of the Certificate III in Carpentry. Series titles are built for learning with colour photographs and illustrations, online tools, and concepts explored in context to help your understanding. Work Health and Safety (WHS) icons identify critical points for concern and student activities help you apply the knowledge and skills.

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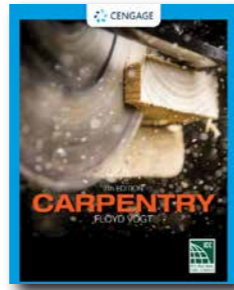
1. Working safely at heights 2. Powder actuated tools 3. Elevating work platforms 4. Limited height scaffolding

CARPENTRY, 7E

Floyd Vogt, State University of New York, Delhi

© 2020, 1040pp, Hardback, 9781337798198

CENGAGE | MINDTAP ebook



Refine the skills needed to become an accomplished professional carpenter with the in-depth coverage and practical applications found in CARPENTRY, Seventh Edition. This bestseller by well-known expert Floyd Vogt presents the intricate system of contemporary

light frame building construction using reader-friendly, step-by-step procedures. Content follows the logical path of a residential project, using thorough explanations, easy-to-follow diagrams, and dynamic real-world visuals to explore building plans, sitework and layout, footings and foundations, framing, interior and exterior surfaces, cabinetry, and more. The new edition features essential information on traditional construction, as well as today's latest practices, including contemporary safety tools and techniques, use of alternative construction such as concrete forms, and "green" building techniques. This edition also includes additional emphasis on how techniques apply to commercial drawings and construction. From building layout through finishing with trim carpentry, each section features step-by-step procedures and photo-realistic drawings for key carpentry jobs, along with tips of the trade and insights into today's industry. In addition, a new online MindTap provides interactive learning tools ideal for today's learners, making it even easier for you to prepare for success as a professional carpenter.

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Lumber. 7. Wood I-Joists. 8. Glue-Laminated Lumber. UNIT 4. Fasteners. 9. Nails, Screws, and Bolts. 10. Anchors and Adhesives. UNIT 5. Hand Tools. 11. Layout Tools. 12. Boring and Cutting Tools. 13. Fastening and Dismantling Tools. UNIT 6. Portable Power Tools. 14. Saws, Drills, and Drivers. 15. Planes, Routers, and Sanders. 16. Fastening Tools. UNIT 7. Stationary Power Tools. 17. Circular Saw Blades. 18. Radial Arm and Miter Saws. 19. Table Saws. UNIT 8. Jobsite Safety and Scaffolds. 20. Jobsite Safety and Construction Aids. 21. Scaffolds. UNIT 9. Architectural Plans and Building Codes. 22. Understanding Architectural Plans. 23. Floor Plans. 24. Sections and Elevations. 25. Plot and Foundation Plans. 26. Building Codes and Zoning Regulations. SECTION II: ROUGH CARPENTRY. UNIT 10. Building Layout. 27. Leveling and Layout Tools. 28. Laying Out Foundation Lines. UNIT 11. Concrete Form Construction. 29. Foundations and Concrete. 30. Flatwork Forms. 31. Vertical Formwork. 32. Concrete Stair Forms. 33. Foundation Damp Proofing and Termite Control. UNIT 12. Floor Framing. 34. Wood Frame Construction. 35. Layout and Construction of the Floor Frame. UNIT 13. Exterior Wall Framing. 36. Exterior Wall Frame Parts. 37. Framing the Exterior Wall. UNIT 14. Interior Rough Work. 38. Interior Partitions and Ceiling Joists. 39. Backing, Blocking, and Furring. 40. Steel Framing. UNIT 15. Roof Framing. 41. Roof Types and Terms. 42. Gable and Shed Roofs. 43. Trussed Roofs. UNIT 16. Advanced Roof Framing. 44. Hip Roofs. 45. Intersecting Roofs. 46. Advanced Roofing Details. 47. Value Engineering. UNIT 17. Stair Framing. 48. Stairways and Stair Design. 49. Stair Layout and Construction. UNIT 18. Insulation and Ventilation. 50. Thermal and Acoustical Insulation. 51. Condensation and Ventilation. SECTION III: EXTERIOR FINISH. UNIT 19. Roofing. 52. Asphalt Shingles and Tile Roofing. 53. Wood Shingles and Shakes. 54. Flashing. UNIT 20. Windows. 55. Window Terms and Types. 56. Window Installation and Glazing. UNIT 21. Exterior Doors. 57. Door Frame Construction and Installation. 58. Door Fitting and Hanging. 59. Installing Exterior Door Hardware. UNIT 22. Siding and Cornice Construction. 60. Siding Types and Sizes. 61. Applying Vertical and

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CARPENTRY, INTERNATIONAL EDITION, 6E

Floyd Vogt, State University of New York, Delhi

© 2014, 944pp, Paperback, 9781133608462

ebook



Refine the skills needed to become an accomplished professional carpenter with the in-depth coverage and practical applications found in **CARPENTRY, International Edition**. This bestseller by well-known expert Floyd Vogt presents the intricate system of

contemporary light frame building construction using reader-friendly, step-by-step procedures. **CARPENTRY, 6E** follows the logical path of a residential project, using thorough explanations, easy-to-follow diagrams and dynamic onsite visuals to explore building plans, sitework and layout, footings and foundations, framing, interior and exterior surfaces, cabinetry, and more. This edition blends all of the essential information for traditional construction with today's latest practices, including contemporary safety tools and techniques, use of alternative construction, such as concrete forms, and "green" building techniques. This edition also introduces more commercial drawings and construction. From initial building layouts through finishing with trim carpentry, each section features step-by-step procedures for key carpentry jobs with tips of the trade and insight into today's industry. Photo-realistic drawings showcase concepts and procedures with detailed, easy to understand information. The new online CourseMate provides interactive learning tools to further ensure you gain the skills and understanding necessary for long-term professional success as a carpenter.

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RESIDENTIAL CONSTRUCTION ACADEMY, 3E

Facilities Maintenance: Maintaining, Repairing, and Remodeling

Kevin Standiford, Arkansas Teacher Retirement System, Little Rock, AR, Lead Program Analyst

© 2014, 592pp, Paperback, 9781133282433

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Created in partnership with the Home Builders Institute (HBI), the workforce development arm of the National Association of Home Builders (NAHB), the Residential Construction Academy Series is the only program based on the National Skill Standards for

residential construction. Step-by-step illustrations and an easy-to-read writing style make **RESIDENTIAL CONSTRUCTION ACADEMY: FACILITIES MAINTENANCE, 3E** the powerful tool you need for any facilities maintenance course. This edition walks you through a straightforward approach that describes common maintenance tasks in detail, like carpentry, wiring, groundskeeping, appliance repair, painting, plumbing, and HVAC. Enhanced chapters on basic math and blueprint reading give you the most comprehensive training available. See the last three chapters for your energy efficiency concerns, two chapters on Weatherization and one on Solar. Plus, each section emphasizes safety and highlights the skills you can build that employers are searching for. **RESIDENTIAL CONSTRUCTION ACADEMY: FACILITIES MAINTENANCE, 3RD** is the manual you need to develop a solid foundation in facilities maintenance.

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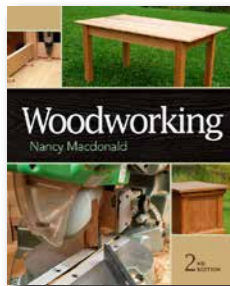
1. Customer Service Skills. 2. Methods of Organizing, Trouble-shooting, and Problem Solving. 3. Applied Safety Rules. 4. Fasteners, Tools, and Equipment. 5. Practical Electrical Theory. 6. Electrical Facilities Maintenance. 7. Carpentry. 8. Surface Treatments. 9. Plumbing. 10. Heating, Ventilation, and Air-Conditioning Systems. 11. Appliance Repair and Replacement. 12. Trash Compactors. 13. Elevators. 14. Pest Prevention. 15. Landscaping and Groundskeeping. 16. Basic Math for Facilities Maintenance Technicians. 17. Blueprint Reading for Facility Maintenance Technicians. 18. Weatherization Concepts. 19. Weatherization Installation, Maintenance and Repair. 20. Solar Systems, Maintenance and Repair.

WOODWORKING, 2E

Nancy MacDonald, State University of New York at Delhi

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A comprehensive guide for aspiring carpenters, cabinetmakers, or woodworking hobbyists, **WOODWORKING**, 2nd Edition introduces the basics of woodworking tools and materials while also exploring the art of creating finished pieces and

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SECTION 1: INTRODUCTION TO THE WORLD OF WOODWORKING. 1. The Woodworking Industry. 2. General Safety Practices. SECTION 2: TOOLS OF THE TRADE. 3. Hand Tools. 4. Portable Power Tools. 5. Stationary Shop Tools. SECTION 3: CLAMPS, FASTENERS AND ADHESIVES. 6. Clamps. 7. Fasteners. 8. Adhesives. SECTION 4: WOODWORKING MATERIALS. 9. Wood. 10. Panel Products. 11. Veneer. 12. Synthetic Materials. SECTION 5: JOINERY AND ASSEMBLY. 13. Construction Methods. 14. Stock Preparation. 15. Case Joints. 16. Frame Joints. 17. Rail Joints. 18. Housed Joints. 19. Making Wide Panels, Thick Blanks, and Corner Joints. SECTION 6: CABINET AND FURNITURE ANATOMY. 20. Cabinets. 21. Cabinet Doors and Drawers. 22. Tables and Desks. 23. Chests. 24. Beds. 25. Chairs. 26. Hardware. SECTION 7: FINISHING. 27. Surface Preparation. 28. Finishes and Application Methods. SECTION 8: SPECIAL TOPICS. 29: Bending Wood. 30. Veneering. 31. Decorative Techniques. 32. Designing a Project. 33. Fabricating Countertops. 34. Running Your Own Business.

GREEN BUILDING

Principles and Practices in Residential Construction

Abe Kruger; Carl Seville

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ebook



GREEN BUILDING: PRINCIPLES AND PRACTICES IN RESIDENTIAL CONSTRUCTION provides a current, comprehensive guide to this exciting, emerging field. From core concepts to innovative applications of cutting-edge

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Introduction to Green Building: Principles and Practices in Residential Construction. 1. Green Building: An Overview. 2. The House as a System. 3. Planning for Green from the Start. 4. Insulation and Air Sealing. 5. Foundations. 6. Floors and Walls. 7. Roofs and Attics. 8. Fenestration. 9. Exterior Wall Finishes. 10. Outdoor Living Spaces. 11. Landscaping. 12. Interior Finishes. 13. HVAC. 14. Electrical. 15. Plumbing. 16. Renewable Energy.

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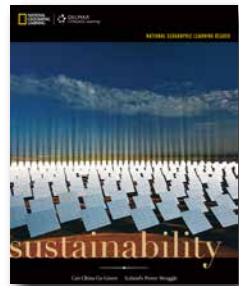
The Big Idea: Safe Houses. Technology: Town on the Move. How to Help: Don't Fan the Flames. My Seven: What We Learn from Deadly Quakes Physical Change. Tunnel Vision. Up On the Roof. The New Great Walls. Saving Energy: It Starts at home. Next: Simulating Wildfires. Technology: Full Tilt. Kazakhstan's Tomorrowland. Village Green Biomimetics.

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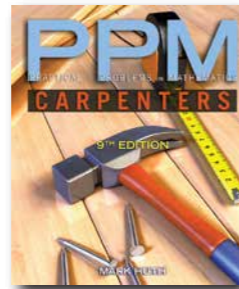
Can China Go Green. Iceland's Power Struggle. Plugging into the Sun. Can Solar Save Us. The 21st Century Grid. Future Power. The Big Idea: Get the Salt Out. High Marks for Clean Water. The Deep Dilemma. Next: Space Elevator. Environment: London's Green Giant. Up on the Roof.

PRACTICAL PROBLEMS IN MATHEMATICS FOR CARPENTERS, 9E

Mark Huth

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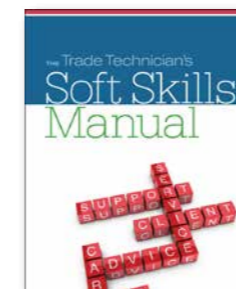
21. Square Measure. 22. Surface measurement: Triangles. 23. The Framing Square. 24. Surface Measurement: Irregular Figures. 25. Surface Measurement: Circles. 26. Volume Measurement: Cubes and Rectangular Solids. 27. Board Measure. 28. Volume Measurement. 29. Weight Measure. Section VI: POWERS AND ROOTS. 30. Applications of Exponents in Formulas. 31. Using Square Root to Find Sides of Right Triangles.

THE TRADE TECHNICIAN'S SOFT SKILLS MANUAL

Steve Coscia

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Learning to express yourself in a positive and professional way can be an art-form. THE TRADE TECHNICIAN'S SOFT SKILLS MANUAL, teaches these important soft skills with line drawings, photographs, and anecdotes from real case

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CONSTRUCTION MANAGEMENT

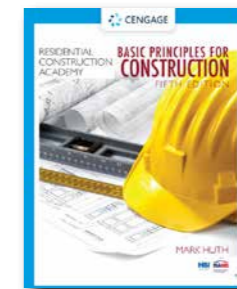
RESIDENTIAL CONSTRUCTION ACADEMY, 5E

Basic Principles for Construction

Mark W. Huth

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Prepare for a successful career in the building trades with RESIDENTIAL CONSTRUCTION ACADEMY: BASIC PRINCIPLES FOR CONSTRUCTION, Fifth Edition. This reader-friendly, highly visual, full-color book was created in partnership

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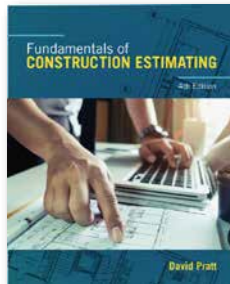
4. Jobsite Safety. 5. Safety with Ladders, Scaffolds, and Machines. Part III: CONSTRUCTION MATH. 6. Whole Numbers. 7. Decimals. 8. Fractions. 9. Linear Measure. 10. Percent (Percentage). 11. Area and Volume. 12. Right Angles. 13. Combined Operations. 14. Hand Tools-Selection, Use and Care. 15. Power Tools-Selection, Use, and Care. 16. Fasteners. 17. Adhesives and Sealants. 18. Rigging. Part IV: PRINT READING. 19. Views. 20. Scales. 21. Alphabet of Lines. 22. Use of Symbols. 23. Plan Views. 24. Elevations. 25. Sections and Details. Appendix A. Appendix B. Glossary. Index.

FUNDAMENTALS OF CONSTRUCTION ESTIMATING, 4E

David Pratt, Southern Alberta Institute of Technology, Calgary, AB, Canada

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Master the key principles of construction estimating and develop the skills you need to become a professional estimator with this comprehensive resource. Presenting estimating procedures in a straightforward and engaging way,

FUNDAMENTALS OF CONSTRUCTION ESTIMATING, Fourth Edition, clearly explains key processes of estimating and costing construction work such as quantity takeoff; pricing of contractor work, sub-trade work, and site overhead; and compiling bid documents. Even better, the text includes realistic drawings of two major projects (residential and commercial) to guide you through a complete estimating process that can be followed by various trades on many different types of construction projects.

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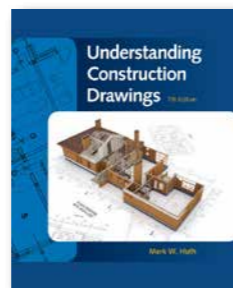
1. Introduction. 2. The Estimating Process and Preliminary Procedures. 3. Measuring Quantities Generally. 4. Measuring Sitework, Excavation and Piling. 5. Measuring Concrete Work. 6. Measuring Masonry Work. 7. Measuring Carpentry and Miscellaneous Items. 8. Pricing Generally. 9. Pricing Construction Equipment. 10. Pricing Excavation and Backfill. 11. Pricing Concrete Work. 12. Pricing Masonry, Carpentry and Finishes Work. 13. Pricing Subcontractors' Work. 14. Pricing General Expenses. 15. Closing the Bid. 16. Budget Estimating. 17. Elemental Estimating. 18. Life-Cycle Costing Appendix Glossary Index.

UNDERSTANDING CONSTRUCTION DRAWINGS, 7E

Mark W. Huth

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This proven, uniquely practical text provides your students with a thorough guide to reading, understanding, and working with construction drawings. Now updated to reflect the 2015 International Building Code® and 2015 International Residential

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and cross-referencing drawings, interpreting complex drawings, and working with commercial construction elements like structural steel, masonry, and reinforced concrete. In addition to updates related to 2015 codes, the text features an all-new unit covering multi-building developments, fire code and sound control measures, and seismic considerations, with new drawings for a four-story, two-family building in an urban, seismic-sensitive area.

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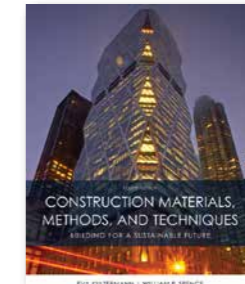
Preface. Part 1: DRAWINGS: TWO-UNIT APARTMENT. 1. The Design-Construction Sequence and the Design Professions. 2. Views. 3. Scales. 4. Alphabet of Lines. 5. Use of Symbols. 6. Plan Views. 7. Elevations. 8. Sections and Details. Part 1 Test. Part 2: READING DRAWINGS FOR TRADE INFORMATION: LAKE HOUSE 9. Clearing and Rough Grading the Site. 10. Locating the Building. 11. Site Utilities. 12. Footings. 13. Foundation Walls. 14. Drainage, Insulation, and Concrete Slabs. 15. Framing Systems. 16. Columns, Piers, and Girders. 17. Floor Framing. 18. Laying Out Walls and Partitions. 19. Framing Openings in Walls. 20. Roof Construction Terms. 21. Roof Trusses. 22. Common Rafters. 23. Hip and Valley Framing. 24. Cornices. 25. Windows and Doors. 26. Exterior Wall Coverings. 27. Decks. 28. Finishing Site Work. 29. Fireplaces. 30. Stairs. 31. Insulation and Room Finishing. 32. Cabinets. 33. Lake House Specifications. Part 2 Test. Part 3: MULTIFAMILY CONSTRUCTION: URBAN COURTS. 34. Orienting the Drawings. 35. Fire-Rated and Acoustical Considerations. 36. Seismic Considerations. Part 3 Test. Part 4: HEAVY COMMERCIAL CONSTRUCTION: SCHOOL ADDITION. 37. Heavy Commercial Construction. 38. Coordination of Drawings. 39. Structural Drawings. 40. HVAC & Plumbing Drawings. 41. Electrical Drawings. Part 4 Test. Appendix A: Math Reviews. Appendix B: Material Symbols in Sections. Appendix C: Plumbing Symbols. Appendix D: Electrical Symbols. Appendix E: Abbreviations. Glossary. Index.

CONSTRUCTION MATERIALS, METHODS AND TECHNIQUES, 4E

William P. Spence, retired, Pittsburgh State University; Eva Kultermann, College of Architecture, Illinois Institute of Technology

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Explore the most up-to-date green and sustainable methods for residential and commercial building construction as well as the latest materials, standards, and practices with CONSTRUCTION MATERIALS, METHODS AND TECHNIQUES: BUILDING FOR A SUSTAINABLE FUTURE, 4E.

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PART I: INTRODUCTION. 1. The Construction Industry: An Overview. 2. Regulatory Constraints, Standards and Sustainability. PART II: SITE CONSTRUCTION AND EARTHWORK. 3. Properties of Materials. 4. The Building Site. 5. Soils. 6. Foundations. PART III: CONCRETE AND MASONRY. 7. Concrete. 8. Cast-In-Place Concrete. 9. Precast Concrete. 10. Mortars for Masonry Walls. 11. Clay Brick and Tile. 12. Concrete Masonry. 13. Stone. 14. Masonry Construction. PART IV: METALS, WOOD AND PLASTICS. 15. Ferrous Metals. 16. Nonferrous Metals. 17. Steel Frame

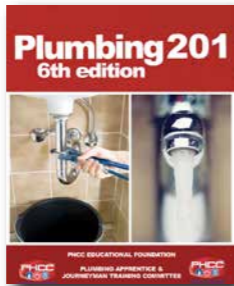
Construction. 18. Wood. 19. Products Manufactured from Wood. 20. Wood and Metal Light Frame Construction. 21. Heavy Timber Construction. 22. Finishing the Exterior and Interior of Light Wood Frame Buildings. 23. Plastics. PART V: THERMAL AND MOISTURE/OPENINGS/FINISHES. 24. Thermal Insulation and Vapor Barriers. 25. Bonding Agents, Sealers, and Sealants. 26. Bituminous Materials. 27. Roofing Systems. 28. Glass. 29. Doors, Windows, Entrances, and Storefronts. 30. Cladding Systems. 31. Interior Finishes, Paints and Coatings. 32. Acoustical Materials. 33. Interior Walls, Partitions, and Ceilings. 34. Flooring. 35. Specialties, Equipment and Furnishings. 36. Special Construction. 37. Conveying Systems. 38. Fire-Suppression Systems. 39. Plumbing Systems. 40. Heating, Air-Conditioning, Ventilation, And Refrigeration. 41. Electrical Equipment And Systems. 42. Electronic Safety and Security. Appendices.

PLUMBING 201, 6E

PHCC Educational Foundation Plumbing Apprentice & Journeyman Training Committee

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PLUMBING 201, Sixth Edition, offers practical knowledge and skills grounded in the real-world issues that face plumbing professionals. This proven resource was developed in partnership with the PHCC Educational Foundation, with curriculum and content

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2. Pipe Joining Techniques.
3. Plastic Pipe and Fittings.
4. Introduction to Welding, Gas Welding, and Safety.
5. Soldering, Brazing, Cutting, and Gas Welding.
6. Piping Materials, Sources, and Distribution for Potable Water.
7. Water Pipe Sizing: Main and Branch and Individual Run Systems.
8. Water Heaters and Hot Water Distribution.
9. Cross-Connection Protection and Pipe Identification.
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14. Mathematics Review and Linear Measure.
15. Offsets.
16. Properties of Water.
17. Venting Plumbing Drainage Systems.
18. Sump Pumps, Sewage Pumps, and Sewage Ejectors.
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Plumbing Traps. 20. Fixture Supports. 21. Hoisting and Rigging. 22. Safety Concepts. 23. Rough-In Sheets. 24. Details, Sections, and Exploded View Drawings.

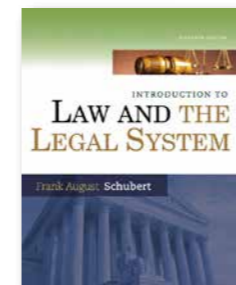
INTRODUCTION TO HYDRAULICS & HYDROLOGY, 4E

With Applications for Stormwater Management

John E. Gribbin, Essex County College

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With its comprehensive coverage of hydraulics and hydrology in a non-calculus format, the Fourth Edition of INTRODUCTION TO HYDRAULICS & HYDROLOGY continues the same straightforward, practical approach that has made previous editions

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2. Fluid Mechanics.
3. Fundamental Hydrostatics.
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5. Hydraulic Devices.

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RESIDENTIAL CONSTRUCTION ACADEMY, 3E

Facilities Maintenance: Maintaining, Repairing, and Remodeling

Kevin Standiford, Arkansas Teacher Retirement System, Little Rock, AR, Lead Program Analyst

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Created in partnership with the Home Builders Institute (HBI), the workforce development arm of the National Association of Home Builders (NAHB), the Residential Construction Academy Series is the only program based on the National Skill Standards for

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you need to develop a solid foundation in facilities maintenance.

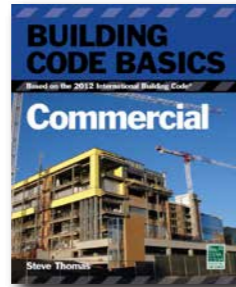
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BUILDING CODE BASICS, 2E

Commercial; Based on the International Building Code
International Code Council (ICC)

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When you are looking for an introduction to the International Building Code® (IBC®), look for a resource that was designed especially for you – look for BUILDING CODE BASICS. Aimed at first-time users of the Code, the book explores its base requirements in a

straightforward, easy-to-read format. From technical jargon to the IBC's more complex regulations, it simplifies critical concepts so that students can begin to build a foundation for learning and applying the Code. This valuable guide is based on the 2012 edition of the IBC, making it an up-to-date, step-by-step guide to understanding and applying its provisions. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

GREEN BUILDING

Principles and Practices in Residential Construction
Abe Kruger; Carl Seville

© 2013, 608pp, Hardback, 9781111135959

ebook



GREEN BUILDING: PRINCIPLES AND PRACTICES IN RESIDENTIAL CONSTRUCTION provides a current, comprehensive guide to this exciting, emerging field. From core concepts to innovative applications of cutting-edge

technology and the latest industry trends, this text offers an in-depth introduction to the construction of “green” homes. Unlike many texts that adopt a product-oriented approach, this book emphasizes the crucial planning, processes, and execution methods necessary for effective, environmentally sound construction. This text demonstrates that Earth-friendly products and energy-efficient materials take planning in order to make a building truly green. This visionary text helps students and professionals develop the knowledge and skills to “think green” from start to finish, empowering and inspiring them to build truly sustainable homes.

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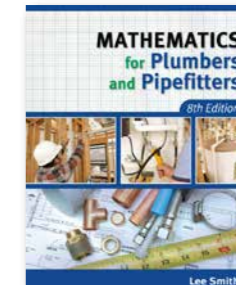
Introduction to Green Building: Principles and Practices in Residential Construction. 1. Green Building: An Overview. 2. The House as a System. 3. Planning for Green from the Start. 4. Insulation and Air Sealing. 5. Foundations. 6. Floors and Walls. 7. Roofs and Attics. 8. Fenestration. 9. Exterior Wall Finishes. 10. Outdoor Living Spaces. 11. Landscaping. 12. Interior Finishes. 13. HVAC. 14. Electrical. 15. Plumbing. 16. Renewable Energy.

MATHEMATICS FOR PLUMBERS AND PIPEFITTERS, 8E

Lee Smith

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ebook



Now in its 8th edition, MATHEMATICS FOR PLUMBERS AND PIPEFITTERS delivers the essential math skills necessary in the plumbing and pipefitting professions. Starting with a thorough math review to ensure a solid foundation, the book

progresses into specific on-the-job applications, such as pipe length calculations, sheet metal work, and the builder's level. Broad-based subjects like physics, volume, pressures, and capacities round out your knowledge, while a new chapter on the business of plumbing invites you to consider an exciting entrepreneurial venture. Written by a Master Plumber and experienced vocational educator, MATHEMATICS FOR PLUMBERS AND PIPEFITTERS, 8th Edition includes a multitude of real-world examples, reference tables, and formulas to help you build a rewarding career in the plumbing and pipefitting trade.

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1. Review of Fundamentals. 2. Pipe Length Calculations. 3. Sheet Metal Work. 4. Volumes, Pressures, Capacities. 5. Physics. 6. Heating. 7. The Builder's Level. 8. The Business of Plumbing.

NATIONAL GEOGRAPHIC READER: ARCHITECTURE & CONSTRUCTION (WITH VPG EBOOK PRINTED ACCESS CARD)

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CODE SOURCE ACCESSIBILITY

Codes, Standards, and Guidelines

International Code Council (ICC); Dominic Marinelli

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With a single resource, you can learn to translate key state and federal accessibility requirements into clear, easy-to-understand and easy-to-apply explanations. It's all contained in CODE SOURCE ACCESSIBILITY: CODES, STANDARDS,

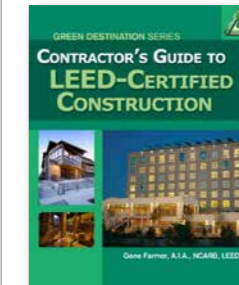
AND GUIDELINES, the groundbreaking resource that explores the accessibility requirements that apply to commercial, residential, and existing buildings. The book focuses on four major industry publications: the International Building Code® (IBC®) and its accessibility reference standard A117.1 – 2003, the Revised Americans with Disabilities Act/ Architectural Barriers Act Accessibility Guidelines (ADAAG 2004), and the Federal Fair Housing Act's Accessibility Guidelines (FH Act). Working in agreement with one another, the standards set forth by these documents serve as the guiding principles for the construction of code-compliant buildings, and CODE SOURCE ACCESSIBILITY: CODES, STANDARDS, AND GUIDELINES is the perfect collection of their most critical provisions. Not intended to replace the full state and federal accessibility requirements, this concise yet thorough resource will help students to learn and quickly reference basic code-compliant accessibility standards for people with disabilities. It will also help readers to avoid the future pitfalls of not adhering to the standards, such as costly litigation and retrofitting, making it a tool they won't want to be without. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

CONTRACTOR'S GUIDE TO LEED CERTIFIED CONSTRUCTION

Gene Farmer, Florida International University

© 2012, 376pp, Paperback, 9781111036676

ebook



Contractor's Guide to LEED Certified Construction is the consummate source of LEED information for all construction students. Unlike other LEED books that focus on the totality of LEED compliance, this one-of-a-kind resource focuses on the narrower topic of

construction-related requirements. It offers detailed explanations of the rationale for each construction credit, as well as strategies for achieving LEED compliance. With a clear, logical organization, the book will serve as a learning guide for students and as a valuable construction reference as they progress into the world of work. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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Part I: SUSTAINABLE CONSTRUCTION. 1. Background and Environmental Concerns. 2. Introduction to Leadership in Energy and Environmental Design, LEED. 3. The LEED Project Team. 4. Sustainable Project Management. Part II: LEED REQUIREMENTS. 5. Construction Activity Pollution Prevention. 6. Construction Waste Management. 7. Materials Recycled Content. 8. Regional Materials. 9. Rapidly Renewable Materials. 10. Certified Wood. 11. Indoor Air Quality. 12. Construction Indoor Air Quality Management Plan: During Construction. 13. Construction Indoor Air Quality Management Plan: Before Occupancy. 14. Low-Emitting Materials: Adhesives and Sealants. 15. Low-Emitting Materials: Paints and Coatings. 16. Low-Emitting Materials: Flooring Systems.

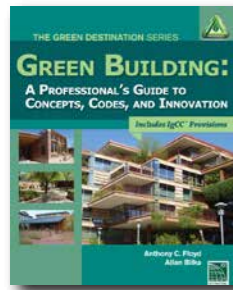
17. Low-Emitting Materials: Composite Wood and Agrifiber Products. Bibliography. Vocabulary. Appendix.

GREEN BUILDING

A Professional's Guide to Concepts, Codes and Innovation

International Code Council (ICC); Anthony C. Floyd

© 2012, 304pp, Paperback, 9781111035112



The cutting-edge green building projects of today are quickly becoming standard practice for tomorrow. In order for industry professionals to keep up with this trend, they'll need to have a solid grasp on green building, and the technologies,

market forces, and governmental policies that drive it. Green Building: A Professional's Guide to Concepts, Codes, and Innovation is designed for those seeking a better understanding of current design and building performance issues. Coverage includes straightforward explanations of how buildings and ecosystems can work together, as well as the sustainability concerns inspiring current regulations. Relevant codes and standards are discussed in-depth, with particular attention to the International Green Construction Code®. Knowledge is essential for environmentally-appropriate and efficient building solutions. Readers of this book will have a better understanding of where the building industry is headed and how to become compliant with green practices and regulations. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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HVACR 401

Heat Pumps

John Hohman

© 2012, 400pp, Paperback, 9781428340022

ebook



HVACR 401: HEAT PUMPS sets itself apart from other books on the market with its emphasis on the service technician perspective, instead of the design engineer viewpoint. The book begins with a review of the refrigeration cycle in comfort conditioning, and

gradually progresses to more in-depth topics, including electrical schematics, maintenance, geothermal heat pumps, and troubleshooting case studies. With content that has been closely reviewed and revised in conjunction with the most respected national organizations in the HVACR industry (ACCA, PHCC, and RSES), this will prove to be a valuable learning tool that offers a wide range of critical concepts, presented in a clear, straightforward manner that facilitates comprehension and encourages you to apply the information as you learn it. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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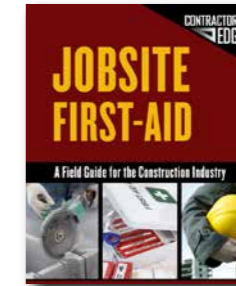
JOBSITE FIRST AID

A Field Guide for the Construction Industry

Dan Johnson

© 2012, 112pp, Spiral, 9781111038632

ebook



When a jobsite emergency arises, it's the people on the job that are the first responders. This gives those people — the contractors, the construction workers, and anyone else onsite — the critical responsibility of quickly and effectively acting to

minimize damage and maximize safety. Prepare for this important role with JOBSITE FIRST AID: A FIELD GUIDE FOR THE CONSTRUCTION INDUSTRY. This book takes a systematic approach to responding to emergency situations, from minor burns to life-threatening events and situations. It is the perfect complement to hands-on safety training, and it's ideally packaged to fit into your toolbox, glove box, or desk drawer, so that it can be easily accessed when needed. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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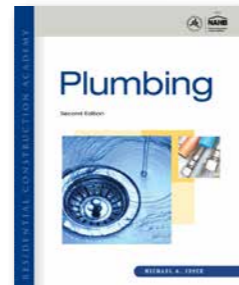
RESIDENTIAL CONSTRUCTION ACADEMY, 2E

Plumbing

Michael A. Joyce; Ray Holder

© 2012, 640pp, Hardback, 9781111307776

ebook



RESIDENTIAL CONSTRUCTION ACADEMY: PLUMBING, 2E is the ideal book to create a direct link between your education/training program and the residential construction industry. The result of a strategic partnership between the

National Association of Home Builder's (NAHB) Home Builders Institute and Delmar, Cengage Learning, the Residential Construction Academy Series is the perfect way to learn essential workplace skills for readers new to the building trades. Written in partnership with the Home Builders Institute, and endorsed by NAHB, RESIDENTIAL CONSTRUCTION ACADEMY: PLUMBING, 2E provides a step-by-step approach to residential plumbing installations based on national skill standards. Focusing on "Green" advancement in the plumbing trades, this book thoroughly explains the process of installing residential plumbing systems by exploring topics such as tools of the trade and proper safety measures and by offering various tips to increase readers' on-the-job productivity. Logically organized to build a foundation of knowledge, this book progresses from the installation of common fixtures to troubleshooting techniques that will aid readers. An emphasis on creative layout and the importance of understanding code variations will foster readers' understanding of plumbing system installation that is based on typical situations as well as unique jobsite conditions.

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DESIGN-BUILD ESSENTIALS

Barbara Jackson

© 2011, 320pp, Hardback, 9781428353039



From a leading authority in the design-build movement, this practical, multi-disciplinary guide brings you all of the fundamentals that constructors, architects, and engineers must understand in order to mitigate risks, optimize results, and be successful

in the design-build arena. Design-Build Essentials is truly a design-builder's resource, addressing the unique integration of both design and construction functions by featuring input from all of the various players associated with delivering a design-build project. Opening with an introduction to the industry and fundamental distinctions of design-build, the book progresses to cover managing the design-build process, the integrated design build team, and concludes with a look at the future of the industry.

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1. Transformation of an Industry. 2. Planning, Designing, and Constructing Projects. 3. Fundamental Characteristics of Design-Build. 4. Buying Design-Build Services. 5. Getting Ready to Compete. 6. Developing Design-Build Estimates. 7. Managing the Design-Build Process. 8. The Design-Build Team. 9. Implications for the Future.

GOING GREEN WITH THE INTERNATIONAL RESIDENTIAL CODE

Scott Caufield

© 2011, 304pp, Paperback, 9781435497290

ebook



Finally, a resource that bridges the gap between the worlds of green building and residential building codes – Going Green with the International Residential Code. The first book of its kind on the market, this indispensable "code-consultant" takes green

building concepts one step further and addresses them as they specifically relate to building codes, and in particular, how they relate to the International Residential Code® (IRC). Because the code books themselves do not directly address green construction issues, this book will help the reader make green decisions about construction methods and materials while staying code compliant. Coverage begins with a Building Code Primer that explores basic permitting and regulatory processes. This fundamental knowledge sets the stage for readers to be better able to successfully incorporate green principles into construction projects and avoid costly mistakes that can occur when key processes are not established and followed beforehand. The book then moves to a review of the IRC®, chapter-by-chapter, identifying areas where provisions of the code will affect a green construction project and where in a project there are green options, as well.

Using tried-and-true real-life examples of green construction techniques throughout, this is the perfect guide to understanding building codes in today's quest to go green. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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HVACR 101

Joseph Moravek, Nance Universal HVACR Technical School, Beaumont, Texas

© 2009, 464pp, Paperback, 9781418066635

ebook



Designed to guide apprentices, entry-level technicians, and first-year students through their first experiences in the HVAC/R trade, HVAC 101 provides a solid and thorough introduction to the field. It is the culmination of the efforts of industry leaders like the

Air Conditioning Contractors of America (ACCA), PHCC Educational Foundation Plumbing Apprentice & Journeyman Training Committee (PHCC Educational Foundation), and Refrigeration Service Engineers Society (RSES). Backed by these organizations and the high standards and cutting-edge resources that they are known for, the book begins with simple concepts that provide an overview of the world of HVAC/R and its main systems and components. Coverage then progresses to increasingly complex procedures, such as maintenance and inspection, installation and repair, and customer service and sales. This building-block approach, combined with numerous practical examples, makes the book the ideal resource for learning and applying key HVAC/R concepts. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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Methods Chapter 9: Energy Efficient Installations Chapter 10: Selling and Customer Service

STRUCTURAL STEEL DRAFTING AND DESIGN, 2E

David C. MacLaughlin, Chippewa Valley Technical College; Hector Estrada

© 2009, 320pp, Paperback, 9781401890322

ebook



Practical and easy to use, this text lays a solid groundwork for beginning and intermediate students to pursue careers in architecture, construction, or civil engineering. The text clarifies the vital interdependence between

structural steel design and fabrication drawings, equipping students to work flexibly with both. First and foremost a drafting book, Structural Steel Drafting and Design gives an overview of structural design theory while providing numerous examples, illustrations, and real-world assignments. Students also become acquainted with critical tables and reference material from industry-standard sources, as well as the merits of Load and Resistance Factor Design and Allowable Strength Design.

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Structural Steel Design Drawing For Steel Construction Steel: An Economical Choice For Commercial And Industrial Buildings: Introduction, Steel Frame Construction, The Economy Of Steel Frame Construction, Load Resistance Factor Design, Summary, Study Questions. An Introduction To The World Of Structural Steel: Introduction, Steel As A Structural Material, Common Structural Steel Rolled Shapes, The Manual Of Steel Construction, Open-Web Steel Joists, Steel Joist Institute Load Tables, Summary, Study Questions. The Structural

Drafter In The Structural Engineering Design Or Fabricator's Office: Introduction, Structural Engineering, Desirable Characteristics Of The Structural Drafter, Engineering Office Organization, Summary, Study Questions. Reading Architectural Drawings For Steel-Framed Buildings: Introduction, Architectural Materials And Symbols, Architectural Floor Plans, Exterior Elevations, Building Sections, Architectural Wall Sections And Details, Summary, Study Questions. An Overview Of Basic Structural Steel Design Calculations: Introduction, Basic Structural Design Considerations And Terminology, The Design And Selection Of Open-Web Steel Joists, The Design And Selection Of W-Shape (Wide Flange) Beams And Girders, The Design Of Beam Bearing Plates, The Design Of Steel Columns, The Design Of Column Baseplates, Summary, Study Questions. The Preparation Of Structural Steel Design Drawings And Details: Introduction, The Basic Objectives Of Structural Design, The Structural Steel Grid System, Structural Steel Sections, Structural Steel Details, Summary, Study Questions. Structural Steel Sections And Details For Commercial And Industrial Buildings : Structural Steel Fabrication Drawings For Steel Construction The Structural Designer/Fabricator Relationship, An Introduction To Structural Steel Shop Drafting, Column Detailing, Structural Connections, Beam Detailing, Anchor Rods and Anchor Rod Plans, The Steel Erection Plan, The Field Bolt List, An Introduction To Non-Rectangular Framing, Cad In Structural Drafting.

CONSTRUCTION LAW FOR MANAGERS, ARCHITECTS, AND ENGINEERS

Nancy J. White, Central Michigan University

© 2008, 528pp, Paperback, 9781418048471

ebook



The construction industry now has a clear, targeted resource for learning pertinent legal principles. Traditional books focus on general legal principles or general construction practices, while this book focuses on that critical place where the law and

construction practices intersect. From labor law to contracts, property law to insurance, Construction Law for Managers, Architects, and Engineers uses real-world examples and clear, straightforward business language to transform complex legal jargon into relevant, applicable legal principles and strategies. This book serves as an ideal reference for managers, architects, engineers, construction executives, as well as a useful learning tool for students seeking the knowledge to succeed in these important fields. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

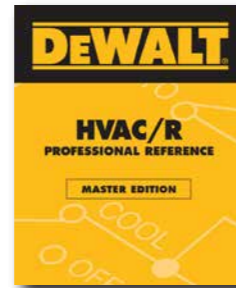
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DEWALT® HVAC/R PROFESSIONAL REFERENCE MASTER EDITION

Paul Rosenberg, Iowa State University; American Contractors Educational Services

© 2007, 768pp, Paperback, 9780977000388



The HVAC/R professional reference contains more than 500 pages of extensive information on such important topics as refrigeration systems, piping, ductwork, motors, compressors, fans, pumps and more.

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Chapter 1 - Formulas and Design Data Chapter 2 - Heating Chapter 3 - Ventilation Chapter 4 - Air Conditioning and Refrigeration Chapter 5 - Piping Chapter 6 - Service Chapter 7 - Troubleshooting Chapter 8 - Electrical and Motors Chapter 9 - Conversion Factors, and Units of Measurement Chapter 10 - Materials, Tools, and Safety Chapter 11 - Symbols and HVAC Affiliation Abbreviations Chapter 12 - Glossary

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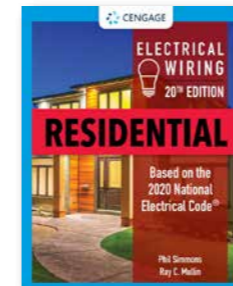
NEW EDITION

ELECTRICAL WIRING RESIDENTIAL, 20E

Ray C. Mullin; Phil Simmons, Simmons Electrical Services

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CENGAGE | MINDTAP ebook



Master the latest industry standards and procedures with longtime market leader ELECTRICAL WIRING RESIDENTIAL, Twentieth Edition. In addition to comprehensive, authoritative coverage of the 2020 National Electrical Code® (NEC®), this trusted

text will give you a thorough grounding in essential electrical theory and applications. Drawing on decades of industry and classroom experience, the authors guide you step-by-step through the critical tasks and responsibilities you can expect as a professional electrician in both new construction and existing homes. Extremely reader-friendly, the text offers detailed explanations without being overly technical, and content clearly relates the NEC to real-world installation processes used by today's professionals. Vivid illustrations coordinate with the latest NEC regulations to provide further clarity, and foldout plans at the back of the text provide hands-on practice applying code requirements to prepare you for career success.

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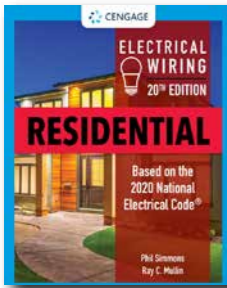
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ELECTRICAL WIRING RESIDENTIAL, 20E

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RESIDENTIAL CONSTRUCTION ACADEMY, 4E

House Wiring

Gregory W. Fletcher, Kennebec Valley Community College

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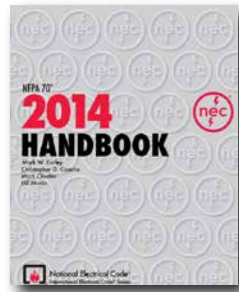
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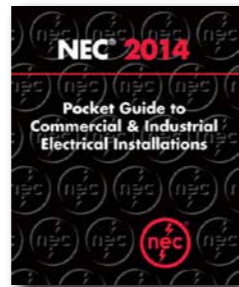
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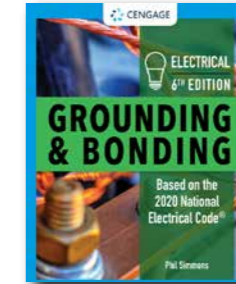
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ELECTRICAL GROUNDING AND BONDING, 6E

Phil Simmons, Simmons Electrical Services

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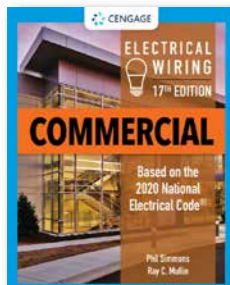
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Phil Simmons, Simmons Electrical Services; Ray C. Mullin

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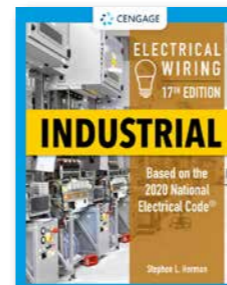
NEW EDITION

ELECTRICAL WIRING INDUSTRIAL, 17E

Stephen L. Herman, Lee College (retired)

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CENGAGE | MINDTAP **ebook**



With step-by-step guidance and a reader-friendly style, **ELECTRICAL WIRING INDUSTRIAL**, Seventeenth Edition, helps you gain the basic knowledge and skills you need to safely install wiring systems in an industrial building. Packed with vivid, full-color

photographs and illustrations to help bring key concepts to life, the text also features lots of example problems and detailed solutions that clearly illustrate how important ideas apply to real-world situations. The Seventeenth Edition has been thoroughly updated to reflect the 2020 National Electric Code®, the industry standard for layout and construction of electrical systems. In addition, a set of building blueprints is included to help you connect chapter concepts to realistic industrial building project.

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1. Plans and Sitework.
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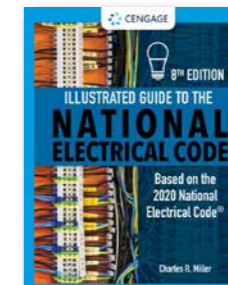
NEW EDITION

ILLUSTRATED GUIDE TO THE NATIONAL ELECTRICAL CODE, 8E

Charles R. Miller

© 2021, 512pp, Paperback, 9780357371527

CENGAGE | MINDTAP **ebook**



This uniquely effective guide will help you master the 2020 National Electrical Code®. The author uses highly detailed, technically accurate illustrations to make even the most complex aspects of the code easier to understand and apply, translating the

often complicated language of the 2020 NEC® into clear, simple instructions and helpful visuals. Organized logically to make learning easier, the text introduces you to fundamental concepts before progressing to requirements for various dwellings, from one-family homes to multi-family housing, commercial locations and special occupancies. In addition, a convenient, modular format makes it easy to reference relevant information whenever you need it. The Eighth Edition of this trusted resource provides detailed information on key updates and additions to the 2020 NEC, so you can confidently master the industry standards and best practices you'll need to know for career success. With comprehensive coverage, an innovative learning approach and accurate, up-to-date information, this indispensable guide is an ideal resource for students and professionals alike.

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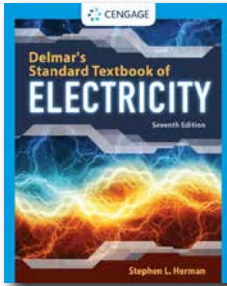
11. Load Calculations. Part IV: COMMERCIAL LOCATIONS. 12. General Provisions. 13. Non-dwelling Load Calculations. 14. Services, Feeders and Equipment. Part V: SPECIAL OCCUPANCIES, AREAS AND EQUIPMENT. 15. Hazardous (Classified) Locations. 16. Health Care. 17. Industrial Locations. 18. Special Occupancies. 19. Specific Equipment.

DELMAR'S STANDARD TEXTBOOK OF ELECTRICITY, 7E

Stephen L. Herman, Lee College (retired)

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CENGAGE | MINDTAP ebook



Combine comprehensive coverage of basic electrical theory with practical “how to” information to prepare students for real practice with DELMAR'S STANDARD TEXTBOOK OF ELECTRICITY, 7E by Stephen Herman. This edition covers all aspects of

basic theory with no assumption of prior electrical knowledge. The author also limits math to basic algebra and trigonometry with step-by-step examples. Quality schematics and illustrations guide students through basic electrical circuits; DC and AC theory; and equipment such as meters, transformers and motors. Numerous examples demonstrate how to complete common tasks electricians perform, while succinct units cover only one or two topics each to ensure clarity. In addition, new coverage of spike and surge protection and motor installation complies with the 2017 NEC. MindTap online resources are also available with interactive multimedia and options to customize and track and report progress.

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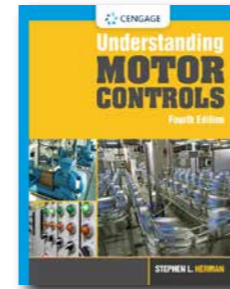
Introduction: Electrical Occupations. Safety Overview. 1. Atomic Structure. 2. Electrical Quantities and Ohm's Law. 3. Static Electricity. 4. Magnetism. 5. Resistors. 6. Series Circuits. 7. Parallel Circuits. 8. Combination Circuits. 9. Kirchhoff's Law, Thevenin's and Norton's Theorems. 9. Measuring Instruments. 10. Using Wire Tables and Determining Conductor Sizes. 11. Conduction in Liquids and Gases. 12. Batteries and Other Sources of Electricity. 13. Magnetic Induction. 14. Basic Trigonometry and Vectors. 15. Alternating Current. 16. Inductance in Alternating Current Circuits. 17. Resistive-Inductive Series Circuits. 18. Resistive-Inductive Parallel Circuits. 19. Capacitors. 20. Capacitance in Alternating Current Circuits. 21. Resistive-Capacitive Series Circuits. 22. Resistive-Capacitive Parallel Circuits. 23. Resistive-Inductive-Capacitive Series Circuits. 24. Resistive-Inductive-Capacitive Parallel Circuits. 25. Surge, Spike, and Lightning Protection. 26. Three-Phase Circuits. 27. Single-Phase Transformers. 28. Three-Phase Transformers. 29. Direct Current Generators. 30. Direct Current Motors. 31. Three-Phase Alternators. 32. Three-Phase Motors. 33. Single-Phase Motors. 34. Motor Installation. 35. Harmonics.

UNDERSTANDING MOTOR CONTROLS, 4E

Stephen L. Herman, Lee College (retired)

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CENGAGE | MINDTAP ebook



Designed for students with no previous experience in motor controls, Herman's UNDERSTANDING MOTOR CONTROLS, 4E introduces basic principles and guides readers from learning about common motor control components to understanding how to use

components in motor control circuits. Numerous up-to-date illustrations depict troubleshooting circuits while thorough explanations detail basic types of meters and test equipment to troubleshoot control circuits. An updated chapter on installing motors corresponds with the National Electrical Code and clearly illustrates how to select overload heater sizes. Using actual motor control components, hands-on laboratory experiments enable students to practice the concepts they've learned. These student-friendly experiments start with simple circuits before advancing to more complicated circuits involving timing relays and auto-transformer starters.

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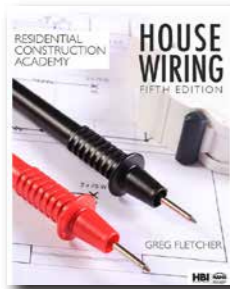
RESIDENTIAL CONSTRUCTION ACADEMY, 5E

House Wiring

Gregory W. Fletcher, Kennebec Valley Community College

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Gain the knowledge, hands-on skills, and industry insights you need to succeed with this proven guide to the latest and best practices in residential electrical wiring. Completely up to date with the 2017 National Electrical Code® and key Home Builders Institute (HBI) National Skill Standards, this vividly illustrated, full-color text will give you a thorough grounding in basic residential wiring concepts. In addition, you'll learn about "green" topics such as sustainable building practices and alternative energy systems, as well as practical applications, real-world scenarios, and safety practices you're likely to encounter on the job. With special features to reinforce learning in every chapter, plus helpful print and digital support materials, RESIDENTIAL CONSTRUCTION ACADEMY: HOUSE WIRING, Fifth Edition, is your ideal resource for career success.

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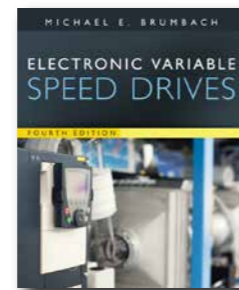
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ELECTRONIC VARIABLE SPEED DRIVES, 4E

Michael E. Brumbach, York Technical College, Rock Hill, South Carolina; Jeffrey A. Clade, York Technical College, Rock Hill, South Carolina

© 2018, 272pp, Paperback, 9781133134046

ebook



Gain a thorough understanding of today's electronic variable speed drives with this one-of-a-kind practical guide. ELECTRONIC VARIABLE SPEED DRIVES, 4E provides the information essential for mastering DC and inverter drive technology. Using a logical structure, this book introduces fundamental drive circuits before presenting more complex drive circuits. This new edition highlights the most current technology advances for drives. The authors use their extensive industry and teaching experience to present theory in a clear, straightforward manner with the emphasis you need on both troubleshooting and maintenance. New hands-on activities provide additional practice using the Allen-Bradley PowerFlex 70, while numerous waveform schematics guide you through operating different types of drives and interpreting their circuitry. Specific chapters focus on digital regenerative DC drives and frequency inverters as well as mechanical and electrical installation, set-up, tuning, programming, operating, and troubleshooting of each drive.

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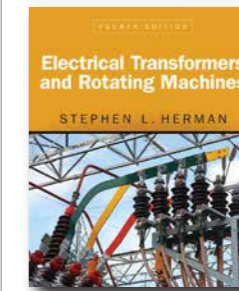
Introduction. 1. Introduction to Variable Frequency Drives. 2. Review of Physical, Electrical, and Motor Terminology. 3. Variable Frequency Drive (VFD) Basics. Activity 3-1: VFD Familiarization. 4. VFD Installation. 5. VFD Programming. Activity 5-1: Local/Remote Control. Activity 5-2: Motor Magnetic Field Current. Activity 5-3: Reversing Directions. Activity 5-4: Acceleration and Deceleration. Activity 5-5: Using the VFD's I/O. Activity 5-6: Master/Slave. Activity 5-7: Skip Frequencies. Activity 5-8: S-Curves. Activity 5-9: Braking. Activity 5-10: Voltage Boost. Activity 5-11: Operating Above Base Motor Speed. 6. VFD Troubleshooting and Maintenance. Activity 6-1: I/O Waveforms. Activity 6-2: Checking IGBT Modules. 7. DC Drives. Glossary. Index.

ELECTRICAL TRANSFORMERS AND ROTATING MACHINES, 4E

Stephen L. Herman, Lee College (retired)

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ebook



Written specifically for future electricians, ELECTRICAL TRANSFORMERS AND ROTATING MACHINES, 4E delivers comprehensive coverage that reflects real-world practice. Extremely student friendly, the book uses common language in

a format that is easy to understand. Offering the ideal blend of theory and hands-on applications, it integrates experiments throughout -- enabling you to put what you learn into practice. In addition, insightful schematics and illustrations ensure your thorough understanding of key concepts.

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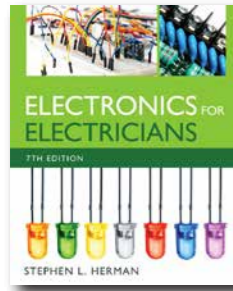
1. Magnetism. 2. Magnetic Induction. 3. Inductance in Alternating-Current Circuits. 4. Single-Phase Isolation Transformers. 5. Autotransformers. 6. Current Transformers. 7. Three-Phase Circuits. 8. Three-Phase Transformers. 9. Single-Phase Loads for Three-Phase Transformers. 10. Transformer Installation. 11. Transformer Cooling. 12. Transformer Maintenance. 13. Harmonics. 14. Direct Current Generators. 15. Direct Current Motors. 16. Alternators. 17. Three-Phase Motors. 18. Single-Phase Motors. 19. Motor Maintenance and Troubleshooting. 20. Motor Nameplate Data. 21. Motor Installation.

ELECTRONICS FOR ELECTRICIANS, 7E

Stephen L. Herman, Lee College (retired)

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CENGAGE | MINDTAP ebook



The Seventh Edition of **ELECTRONICS FOR ELECTRICIANS** is a practical and relevant guide for anyone preparing for a career in industrial settings. With its updated graphics and increased coverage of important topics, this text helps you understand

components and circuits in terms of how they work, what they do, how to use them, and how to test them. Review questions and problems in every chapter expose you to the electronic devices commonly found in industry -- as well as the circuit applications of those devices -- while lab experiments give you hands-on experience putting what you learn into practice.

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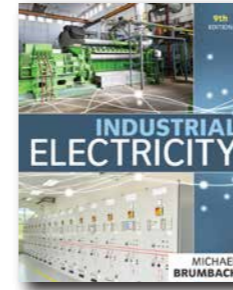
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INDUSTRIAL ELECTRICITY, 9E

Michael E. Brumbach, York Technical College, Rock Hill, South Carolina

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CENGAGE | MINDTAP ebook



INDUSTRIAL ELECTRICITY, Ninth Edition, presents the essentials of electrical theory in a clear, current, logical manner to help you master both fundamental concepts and more advanced subjects relevant to the field of industrial electricity. Coverage begins with foundational topics like

electrical symbols and drawings, current, voltage, resistance, and power, while subsequent chapters introduce Ohm's Law; series, parallel, and combination circuits; and resistive and reactive circuits. The text also includes thorough discussion of advanced subjects such as rotating machinery, motor controls, transformers, electronic drives, and PLCs, as well as practical information on key real-world applications of electrical theory, including installation, maintenance, and troubleshooting. The Ninth Edition features more than 800 illustrations and photos to help explain key concepts and bring theory and practice alike to life.

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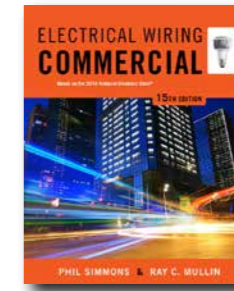
1. Language of Electricity. 2. Electrical Fundamentals. 3. Electrical Power and Energy. 4. Test Equipment. 5. Basic Resistive Electrical Circuits. 6. Magnets and Magnetism. 7. Alternating Current. 8. AC Circuits. 9. Conductor Types and Sizes. 10. Wiring Methods. 11. Wiring Applications. 12. Transformers. 13. Electrical Distribution. 14. Lighting. 15. Electric Heat. 16. DC Generators. 17. DC Motors. 18. AC Generators (Alternators). 19. AC Motors. 20. Motor Control Devices and Circuits. 21. Basic Industrial Electronics. 22. DC Electronic Variable Speed Drives. 23. AC (Inverter) Drives. 24. Programmable Logic Controllers. Appendix A. Appendix B. Appendix C. Glossary. Index.

ELECTRICAL WIRING COMMERCIAL, 15E

Phil Simmons, Simmons Electrical Services; Ray C. Mullin

© 2015, 624pp, Paperback, 9781285186856

ebook



Offering the most current coverage available, **ELECTRICAL WIRING COMMERCIAL**, 15e is completely revised and up to date with the 2014 National Electrical Code®. Extremely reader friendly, the text has long been popular with learners.

Vibrant, full-color illustrations and photographs help you easily grasp difficult concepts. The new edition continues the book's emphasis on newer green technologies and developments within electrical design and installation, including coverage of EV stations in commercial settings. It also offers expansive coverage of safety in the workplace.

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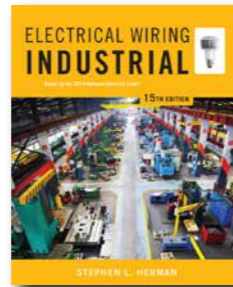
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ELECTRICAL WIRING INDUSTRIAL, 15E

Stephen L. Herman, *Lee College (retired)*

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ELECTRICAL WIRING INDUSTRIAL, 15E is the complete, step-by-step guide and on-the-job reference tool for wiring industrial buildings according to the current 2014 National Electrical Code®.

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1. Plans and Sitework. 2. The Unit Substation. 3. Feeder Bus System. 4. Panelboards. 5. Trolley Busways. 6. Using Wire Tables and Determining Conductor Sizes. 7. Signaling Systems. 8. Motors and Controllers. 9. Motor Installation. 10. Power Factor. 11. Ventilating, Air Conditioning, and Other Facilities. 12. System Protection. 13. Lightning Protection. 14. Site Lighting. 15. Programmable Logic Controllers. 16. Fiber Optics. 17. Hazardous Locations. 18. Harmonics.

ELECTRICAL WIRING RESIDENTIAL, 18E

Ray C. Mullin; Phil Simmons, *Simmons Electrical Services*

© 2015, 816pp, Hardback, 9781285170978

ebook



Delivering the very latest in industry standards and procedures, longtime market leader ELECTRICAL WIRING RESIDENTIAL, 18e continues to provide comprehensive, authoritative coverage that fully implements the 2014 National Electrical Code®.

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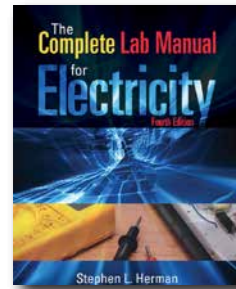
for Ranges, Counter-Mounted Cooking Unit G, and Wall-Mounted Oven. 21. Special-Purpose Outlets--Food Waste Disposer, Dishwasher. 22. Special-Purpose Outlets for the Bathroom Ceiling Heat/Vent/Lights, the Attic Fan, and the Hydromassage Tub. 23. Special-Purpose Outlets--Electric Heating, Air Conditioning. 24. Gas and Oil Central Heating Systems. 25. Television, Telephone, and Low-Voltage Signal Systems. 26. Smoke, Heat, and Carbon Monoxide Alarms, and Security Systems. 27. Service-Entrance Equipment. 28. Overcurrent Protection--Fuses and Circuit Breakers. 29. Service-Entrance Calculations. 30. Swimming Pools, Spas, Hot Tubs, and Hydromassage Baths. 31. Wiring for the Future: Home Automation Systems. 32. Standby Power Systems. 33. Residential Utility Interactive Photovoltaic Systems. Specifications for Electrical Work--Single-Family Dwelling. Appendix. IAEL Membership Application Form. Key Terms. Web Sites. Index (Code and Subject). Plans for Single-Family Dwelling. Sheet 1 of 10 Basement Plan. Sheet 2 of 10 Floor Plan. Sheet 3 of 10 South (Front) Elevation; Window Schedule, Door Schedule. Sheet 4 of 10 East (Right) Elevation; Interior Elevations. Sheet 5 of 10 North (Rear) Elevation; Plot Plan. Sheet 6 of 10 West (Left) Elevation; Room Finish Schedule. Sheet 7 of 10 Section A-A. Sheet 8 of 10 Electrical Basement Plan. Sheet 9 of 10 Electrical Floor Plan. Sheet 10 of 10 Code Requirements for Swimming Pool Wiring. Blank Floor Plan First Floor. Blank Floor Plan Basement.

THE COMPLETE LAB MANUAL FOR ELECTRICITY, 4E

Stephen L. Herman, Lee College (retired)

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Now you can master the hands-on electrical skills you need for professional success with THE COMPLETE LABORATORY MANUAL FOR ELECTRICITY, 4E by best-selling author Stephen Herman. No matter what electrical theory book you

are using, THE COMPLETE LABORATORY MANUAL FOR ELECTRICITY offers the perfect fit with a logical progression of topics and meaningful, cost-effective experiments. Updated lab activities throughout this edition now incorporate the use of wirewound resistors rather than incandescent lamps to correspond with the latest government regulations. You explore all aspects of electrical concepts — from basic electricity through AC theory, transformers, and motor controls. Each lab offers a clear explanation of the circuits to be connected, examples of the calculations to complete the exercise, and step-by-step procedures for conducting the experiment. Trust THE COMPLETE LABORATORY MANUAL FOR ELECTRICITY, 4E as a stand-alone resource or ideal supplement (e.g., to the Delmar Standard Textbook of Electricity) for mastery of the hands-on electrical skills you need the most.

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13. Capacitance. 14. Resistive-Capacitive Series Circuits. 15. RC Parallel Circuits. 16. Resistive-Inductive-Capacitive Series Circuits. 17. Resistive-Inductive-Capacitive Parallel Circuits. 18. Power Factor Correction. SECTION 4: TRANSFORMERS AND MOTORS. 19. Transformer Basics. 20. Single-Phase Transformer Calculations. 21. Transformer Polarities. 22. Autotransformers. 23. Three-Phase Circuits. 24. Three-Phase Transformers. 25. Three-Phase Motors. SECTION 5: MOTOR CONTROLS. 26. Start-Stop Push-Button Control. 27. Multiple Push-Button Stations. 28. Forward-Reverse Control. 29. Sequence Control. 30. Jogging Controls. 31. On-Delay Timers. 32. Off-Delay Timers. 33. Changing the Logic of an On-Delay Timer to an Off-Delay Timer. 34. Designing a Printing Press Circuit. 35. Sequence Starting and Stopping for Three Motors. 36. Hydraulic Press Control Circuit. 37. Design of Two Flashing Lights. 38. Design of Three Flashing Lights. 39. Control for Three Pumps. 40. Oil Pressure Pump Circuit for a Compressor. 41. Autotransformer Starter. Index.

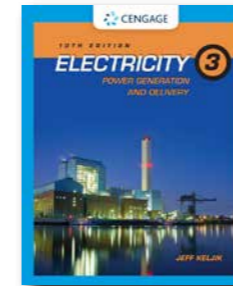
ELECTRICITY 3, 10E

Power Generation and Delivery

Jeffrey J. Keljik, Dunwoody Institute, Minneapolis, MN

© 2014, 280pp, Paperback, 9781111646738

ebook



Updated to the 2011 National Electrical Code®, ELECTRICITY 3: POWER GENERATION AND DELIVERY, 10E explores various types of generators and the delivery of single phase and three-phase power to the customer site. Its thorough coverage of

power generation and delivery includes topics such as DC generators, polyphase circuits, three-phase wye and delta connections, electrical characteristics of three-phase alternators, alternative power sources, transformers, and more. New photos and drawings offer vivid illustrations of text concepts. An excellent resource for both students and practicing electrical workers, ELECTRICITY 3 emphasizes electrical system operation, giving readers a solid understanding of electrical procedures and how to apply them while troubleshooting.

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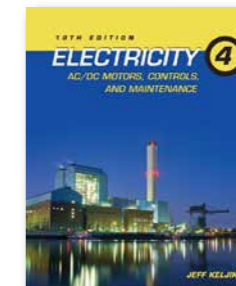
ELECTRICITY 4, 10E

AC/DC Motors, Controls, and Maintenance

Jeffrey J. Keljik, Dunwoody Institute, Minneapolis, MN

© 2014, 372pp, Paperback, 9781111646752

ebook



Updated to the 2011 National Electrical Code®, ELECTRICITY 4: AC/DC MOTORS, CONTROLS, AND MAINTENANCE, 10E delivers practical coverage of AC/DC motors, controls, and maintenance. It offers you quick and easy access to current information on DC

motors, AC motors, motor control, electromechanical and solid-state relays and timers, synchronous motors, installation, sensyn units, motor maintenance, and more. The text combines thorough explanations of how systems work with relevant, hands-on examples of electrical system operation to help you develop troubleshooting skills. National Electrical Code®

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1. The DC Shunt Motor. 2. The DC Series Motor. 3. DC Compound Motors. 4. Summary of Units 1-3. 5. Starting and Operating DC Motors. 6. Electronic DC Motor Control. 7. DC Variable Speed Control. 8. DC Motor Dynamic Braking. 9. Basic Principles of Automatic Motor Control. 10. Relays and Timers. 11. Summary of Units 5-10. 12. Three Phase AC Induction Motors. 13. Starting Three Phase Induction Motors. 14. Controllers for Three Phase Motors. 15.

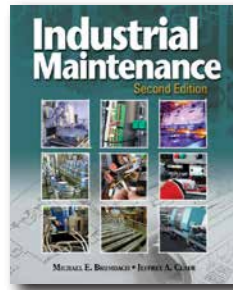
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INDUSTRIAL MAINTENANCE, 2E

Michael E. Brumbach, York Technical College, Rock Hill, South Carolina; Jeffrey A. Clade, York Technical College, Rock Hill, South Carolina

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INDUSTRIAL MAINTENANCE, Second Edition, provides a strong foundation in all five major areas of industrial maintenance, including general, mechanical, electrical, welding, and preventive maintenance. In addition to essential

information on safety, tools, industrial print reading, and electrical theory, this comprehensive text includes a detailed exploration of modern machinery and equipment to help you understand, diagnose, troubleshoot, and maintain a wide variety of industrial machines. This text has also been thoroughly updated and revised to reflect recent developments in this dynamic, rapidly evolving field, including current piping and fluid power symbols, rigging and mechanical installations, magnetism, transformers, motors and sensors, and industrial communications. With comprehensive, up-to-date coverage and a reader-friendly, modular presentation, **INDUSTRIAL MAINTENANCE** is the perfect resource to prepare you for success as an industrial maintenance technician.

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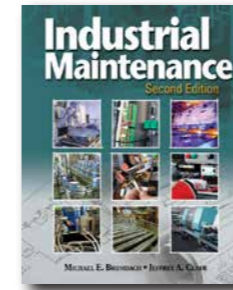
Part I: GENERAL KNOWLEDGE. 1. Safety. 2. Tools. 3. Fasteners. 4. Industrial Print Reading. Part II: MECHANICAL KNOWLEDGE. 5. Mechanical Power Transmission. 6. Bearings. 7. Coupled Shaft Alignment. 8. Lubrication. 9. Seals and Packing. 10. Pumps and Compressors. 11. Fluid Power. 12. Piping Systems. Part III: ELECTRICAL KNOWLEDGE. 13. Electrical Fundamentals. 14. Test Equipment. 15. Electrical Circuits. 16. Wiring Methods. 17. Transformers and Power Distribution. 18. Electrical Machinery. 19. Control and Controlled Devices. 20. Motor Control Circuits. 21. Basic Industrial Electronics. 22. Electronic Variable Speed Drives. 23. Programmable Logic Controllers. 24. Industrial Communications. 25. Lighting. Part IV: WELDING KNOWLEDGE. 26. Gas Welding. 27. Arc Welding. Part V: PREVENTIVE MAINTENANCE. 28. Preventive Maintenance - Developing and Implementing. 29. Mechanical PMs. 30. Electrical PMs. Appendix A. Appendix B. Appendix C. Appendix D. Appendix E. Appendix F. Index.

INDUSTRIAL MAINTENANCE, 2E

Michael E. Brumbach, York Technical College, Rock Hill, South Carolina; Jeffrey A. Clade, York Technical College, Rock Hill, South Carolina

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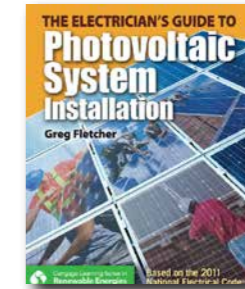
Devices. 20. Motor Control Circuits. 21. Basic Industrial Electronics. 22. Electronic Variable Speed Drives. 23. Programmable Logic Controllers. 24. Industrial Communications. 25. Lighting. Part IV: WELDING KNOWLEDGE. 26. Gas Welding. 27. Arc Welding. Part V: PREVENTIVE MAINTENANCE. 28. Preventive Maintenance - Developing and Implementing. 29. Mechanical PMs. 30. Electrical PMs. Appendix A. Appendix B. Appendix C. Appendix D. Appendix E. Appendix F. Index.

THE GUIDE TO PHOTOVOLTAIC SYSTEM INSTALLATION

Gregory W. Fletcher, Kennebec Valley Community College

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Written with the installing electrician in mind, **THE GUIDE TO PHOTOVOLTAIC SYSTEM INSTALLATION** provides you with a simple, straightforward approach to understanding photovoltaic system installation in both residential and light

commercial buildings. Filled with illustrations, examples, and multiple opportunities for practice, this comprehensive book includes the most up-to-date information on photovoltaic installation available on the market today. In addition, coverage of topics such as the National Electrical Code® requirements for a photovoltaic system installation ensures that you will be well prepared for the North American Board of Certified Energy Practitioners' (NABCEP) entry level photovoltaic installer certification exam.

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1. Introduction to Photovoltaics. 2. PV System Installation Safety. 3. Understanding Electricity Basics. 4. Solar Fundamentals. 5. PV Modules. 6.

Batteries. 7. Charge Controllers. 8. Inverters. 9. PV System Wiring and the NEC. 10. Sizing PV Systems. 11. Installing PV Systems. 12. Maintaining and Troubleshooting a PV System. Appendices.

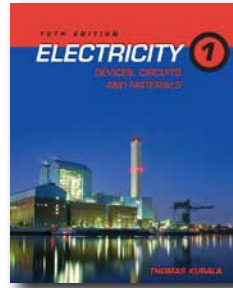
ELECTRICITY 1, 10E

Devices, Circuits, and Materials

Thomas Kubala

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ebook



Designed to help you learn fundamental electrical concepts and explore their practical applications, this trusted text provides a solid foundation in electron theory and movement, direct-current series circuits, parallel circuits, series-parallel circuits, voltage line

drops, rotating machinery fundamentals, and more. **ELECTRICITY 1: DEVICES, CIRCUITS AND MATERIALS**, Tenth Edition, maintains the user-friendly style and proven instructional approach that are so effective, all while incorporating new material and updates based on the 2011 National Electrical Code®. Featuring current industry terminology, photographs of commonly used electrical equipment, and sample problems with solutions, this convenient, affordable text is an ideal choice for anyone interested in mastering basic electricity, house wiring, or commercial installations.

CONTENTS

1. Introduction. 2. Electron Theory and Ohm's Law. 3. Series Circuits. 4. Parallel Circuits. 5. Series-Parallel Circuits. 6. Electrical Energy and Power. 7. Batteries. 8. Electrical Conductors and Wire Sizes. 9. Voltage Drop Across Conductors. 10. Summary Review of Units 1-9. 11. Magnets and Magnetic Fields. 12. Electromagnetism. 13. Generation of Electromotive Force. 14. Direct-Current Motor

Principles. 15. Summary Review of Units 11-14. 16. Typical Bell Circuits. 17. Switch Control of Lighting Circuits. 18. Wiring Materials. 19. Remote Control Systems for Lighting Circuits. 20. Summary Review of Units 16-19.

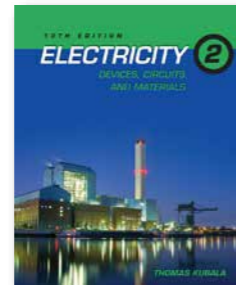
ELECTRICITY 2, 10E

Devices, Circuits and Materials

Thomas Kubala

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ebook



Designed to help you learn fundamental electrical concepts and explore their practical applications, this trusted text provides a thorough introduction to various types of alternating current (AC) circuits, as well as key principles such as power, power factor, power

factor correction, inductive reactance, capacitive reactance, and impedance. **ELECTRICITY 2: DEVICES, CIRCUITS AND MATERIALS**, Tenth Edition, maintains the user-friendly style and proven instructional approach while incorporating new material and updates based on the 2011 National Electrical Code®. Featuring current industry terminology, photographs of commonly used electrical equipment, and sample problems with solutions, this convenient, affordable text is an ideal choice for anyone interested in mastering basic electricity, including AC power, wiring installation, lighting, and effective troubleshooting.

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1. Alternating-Current Principles. 2. Inductance and Inductive Reactance. 3. Capacitance and Capacitive Reactance. 4. Series Circuit: Resistance and Inductance. 5. Series Circuit: Resistance and Capacitance. 6. Series Circuit: Resistance, Inductance and Capacitance. 7. AC Parallel Circuits

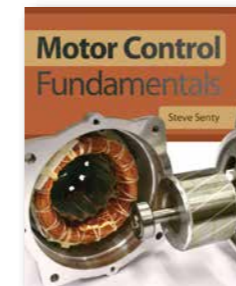
Containing Inductance. 8. AC Parallel Circuits Containing Inductance and Capacitance. 9. AC Power, Power Factor, and Power Factor Correction. 10. Summary Review of Units 1-9. 11. Installation of a Single-Phase, Three-Wire Service Entrance for a Single-Family Residence. 12. Installation of a Single-Phase, Three-Wire Service Entrance for an Apartment Building. 13. Installation of a Three-Phase, Three-Wire Service Entrance. 14. Introduction to Fluorescent Lighting. 15. Installation of Fluorescent Lighting. 16. Summary Review of Units 11-15.

MOTOR CONTROL FUNDAMENTALS

Steve Senty

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1. Electric Induction Theory. 2. Induction Motor Overview. 3. Three-Phase Motor Theory. 4. Single-Phase Induction Motors. 5. Induction Motor Electrical Connections. 6. Motor Nameplates. 7.

Magnetic Relays and Contactors. 8. Overload Units. 9. Magnetic Motor Starters. 10. Motor Starter Circuits. 11. Motor Control Circuit Ladder Diagram Documentation. 12. Two-Wire Motor Control. 13. Three-Wire Motor Control. 14. Control Circuits.

ALTERNATING CURRENT FUNDAMENTALS, 8E

Stephen L. Herman, Lee College (retired)

© 2012, 768pp, Paperback, 9781111125271

ebook



ALTERNATING CURRENT FUNDAMENTALS, 8E, an industrial standard for over thirty years, has been updated to provide you with the most current information available on the essentials of alternating current. The topics in this book are arranged to build your

knowledge, progressing from basic principles such as the differences between peak, rms, and average values to more complex coverage of circuits containing resistance, inductance, and capacitance. This edition of **ALTERNATING CURRENT FUNDAMENTALS, 8E** includes additional information on diodes and rectifiers and contains improved graphics that will assist you in understanding state-of-the-art concepts.

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1. An Introduction to Alternating Current. 2. Alternating Current Circuits Containing Resistance. 3. Inductance in Alternating Current Circuits. 4. Series Circuits - Resistance and Impedance. 5. Capacitors and RC Time Constants. 6. Capacitors in Alternating Current Circuits. 7. Series Circuits: Resistance, Inductive Reactance and Capacitive Reactance. 8. AC Parallel Circuits. 9. Series-Parallel Circuits. 10. Three-Phase Systems. 11. AC Instruments and Meters. 12. Alternating Current

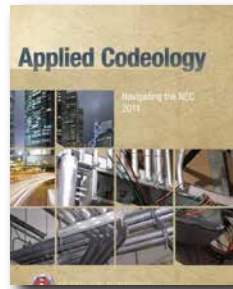
Generators. 13. Transformers. 14. Transformer Connections for Three-Phase Circuits. 15. Special Transformer Applications. 16. Three-Phase Induction Motors. 17. Three-Phase Synchronous Motors. 18. Single-Phase Motors. 19. Control Circuits.

APPLIED CODEOLOGY, 3E

Navigating the NEC® 2011

National Joint Apprenticeship Training Committee

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Revised to reflect the NEC® 2011 and packed with all-new learning features like review questions, and pre-tests and post-tests, this book is a valuable “roadmap” that will familiarize readers with the code and give them the skills and confidence to make code-compliant

installations that are safe and accurate.

DEWALT® ELECTRICAL PROFESSIONAL REFERENCE - 2011 EDITION, 2E

Paul Rosenberg, Iowa State University

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The DEWALT® Electrical Professional Reference 2011 Code gives your students the fast, easy-to-access information they crave and the very latest code essentials you want to give them – all in a handy pocket-sized package!

DIRECT CURRENT FUNDAMENTALS, 8E

Stephen L. Herman, Lee College (retired)

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ebook



For nearly half a century, this widely acclaimed text has presented the fundamental concepts of direct current electricity and magnetism in a straightforward, practical manner. This reader-friendly guide to DC electrical theory and

applications is both thorough and focused, providing detailed coverage in a convenient, affordable volume. The new Eighth Edition retains the distinguishing features that are the cornerstone of this trusted text, including logically organized content that progresses step-by-step from basic principles to advanced concepts. Enhancements for the new edition include updated photographs and illustrations to help you grasp essential concepts quickly and apply your knowledge with confidence, as well as special icons highlighting “green” tips on energy efficiency.

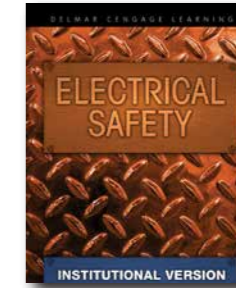
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1. An Introduction to Electricity and Electronics. 2. Electricity Production and Use. 3. Electrostatics. 4. Basic Circuit Concepts. 5. Scientific Notation and Metric Prefixes. 6. Electrical Quantity Measurement. 7. Resistance. 8. Ohms Law. 9. Electrical Power and Energy. 10. Series Circuits. 11. Parallel Circuits. 12. Series-Parallel Circuits and Loaded Voltage Dividers. 13. Conduction in Liquid and Gases. 14. Batteries. 15. Magnetism and Electromagnetism. 16. Applications of Electromagnetism. 17. Electrical Measuring Instruments. 18. Electromagnetic Induction. 19. DC Generators. 20. Mechanical Motion from Electrical Energy. 21. DC Motors. 22. Starters and Speed Controllers. 23. Solid State Control of Direct Current Motors. 24. Solving DC Networks.

ELECTRICAL SAFETY VIDEO DVD

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Viewers will get a first rate introduction to Electrical Safety from this DVD, which allows learners to understand all the most important elements in safety regulations associated with electrical theory. Enhanced with quality animations this DVD includes topics on

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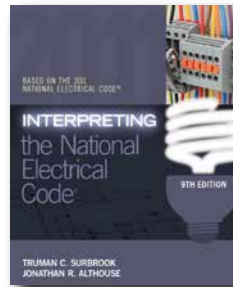
Introduction. Electrical Shock. Arc Flash/Arc Blast. Introduction to Personal Protection Equipment. Fire Resistant (FR) Electrical Rated (ER) Clothing. Hearing and Lung Protection. Lockout/Tagout Procedures. Tools. Meters and Testers. Electrical Safety Program.

INTERPRETING THE NATIONAL ELECTRICAL CODE, 9E

Truman Surbrook, Michigan State University; Jonathan Althouse, Michigan State University

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ebook



Demystify and accurately interpret the National Electrical Code®! Master all sections of the 2011 National Electrical Code® (NEC®) with the accurate, thorough coverage found only in Surbrook/Althouse's INTERPRETING THE NATIONAL ELECTRICAL CODE®, 9E. This easy-to-

understand, trusted text explains all sections of the National Electrical Code using meaningful examples and illustrations that you can readily understand, with valuable insights into all articles of the Code®. Special sections highlight the most important changes from the last version of the Code®, helping you to navigate easily through the new 2011 NEC® requirements. The authors explain each article in detail with thorough discussions, practical examples that illustrate how the Code® is applied, and sample Code® calculations taken from actual field applications. In addition, the authors integrate essential wiring information not directly addressed in the NEC®, but extremely useful in the field. This is a comprehensive, trusted resource you'll reference time and time again throughout your career.

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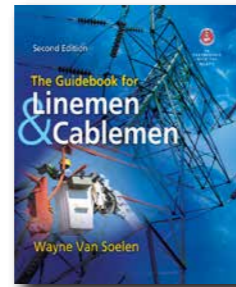
1. General Wiring and Fundamentals. 2. Wire, Raceway, and Box Sizing. 3. Outlets, Lighting, Appliances, and Heating. 4. Services and Feeder Calculations. 5. Grounding and Bonding. 6. Overcurrent Protection. 7. Motor-Circuit Wiring. 8. Transformers. 9. Hazardous Location Wiring. 10. Health Care Facilities. 11. Emergency and Alternate Power Systems. 12. Industrial Electrical Applications. 13. Commercial Wiring Applications. 14. Special Applications Wiring. 15. Review. Index Including Coding Articles. Annex, Metric Conversion Tables.

THE GUIDEBOOK FOR LINEMEN AND CABLEMEN, 2E

Wayne Van Soelen

© 2012, 816pp, Hardback, 97811111035013

ebook



The Guidebook for Linemen and Cablemen, 2nd Edition is the much needed solution to a void that has existed for apprentices seeking to become journeymen linemen and anyone training to work on electrical utility circuits. Packaged as a convenient, single-volume

reference guide on the operation of electrical utility systems, this book will give you what other resources won't: practical coverage of the equipment and situations that power line workers are exposed to on a daily basis, with a focus on ensuring concepts are meaningful and applicable. This book also pays special attention to the order in which topics are addressed; simple concepts are explained first, and the book then builds upon these fundamentals to explain more complex theories, thereby setting a strong foundation for clearly understanding key rules and regulations. This text has been updated to include the most current industry information available, including applications of recent technology. This book also contains in-depth exploration of the mechanical aspects of the job, such as working with rigging, trucks, stringing wire, and tree felling. The need for safety and training is highlighted throughout the book, ultimately giving you a powerful guide for learning the necessary skills to construct, operate, and maintain the lines and cables in an electrical utility system. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

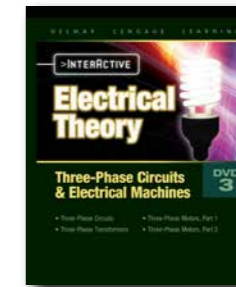
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1. Essentials for powerline workers. 2. Electrical units. 3. Electrical power system overview. 4. Substations. 5. Alternating currents. 6. Three-phase circuits. 7. Awareness in an electrical environment. 8. Constructing overhead powerlines. 9. Constructing underground powerlines. 10. Working with conductors and cables. 11. Operating switch gear. 12. Circuit protection. 13. Installing grounds. 14. Transformers. 15. Supplying quality power. 16. Working with aerial devices. 17. Rigging in powerline work. 18. Working it hot. 19. Outdoor lighting. 20. Revenue metering. 21. Tree work.

ELECTRICAL THEORY 3-PHASE CIRCUITS AND ELECTRICAL MACHINES INTERACTIVE INSTITUTIONAL DVD (10-13)

Delmar

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The ELECTRICAL THEORY 3-PHASE CIRCUITS AND ELECTRICAL MACHINES INTERACTIVE DVD contains a complete set of videos that have been enhanced with interactive graphics, animations, and questions that you can easily use as a homework

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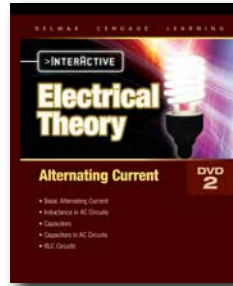
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Three-Phase Circuits. Three-Phase Transformers. Three-Phase Motors, Part 1. Three-Phase Motors, Part 2.

ELECTRICAL THEORY AC INTERACTIVE INSTITUTIONAL DVD

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Basic Alternating Current. Inductance in AC Circuits. Capacitors. Capacitors in AC Circuits. RLC Circuits.

ELECTRICAL THEORY SINGLE PHASE TRANSFORMERS & ELECTRICAL MACHINES INTERACTIVE INSTITUTIONAL DVD (14-17)

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Single-Phase Transformers. DC Machines. Single-Phase Motors, Part 1. Single-Phase Motors, Part 2.

NATIONAL ELECTRICAL CODE 2011

National Fire Protection Association, Quincy, Massachusetts

© 2011, 1pp, Paperback, 9780877659143



The National Electrical Code® 2011 SOFT COVER combines solid, thorough, research-based content with the tools your students need for safe, efficient, code-compliant electrical installations.

NATIONAL ELECTRICAL CODE 2011 HANDBOOK

National Fire Protection Association, Quincy, Massachusetts

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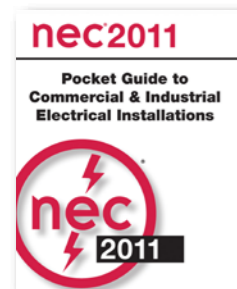


The NEC® 2011 Handbook combines solid, thorough, research-based content with the tools your students need for safe, efficient, code-compliant electrical installations.

NATIONAL ELECTRICAL CODE 2011 POCKET GUIDE FOR COMMERCIAL AND INDUSTRIAL ELECTRICAL INSTALLATIONS

National Fire Protection Association, Quincy, Massachusetts

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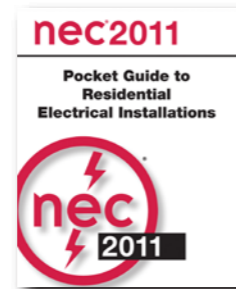


Packaged in a handy, pocket-sized format, the NEC® 2011 Pocket Guide for Commercial & Industrial Electrical Installations is a must-have resource that offers guidelines and installation rules for commercial and industrial occupancies.

NATIONAL ELECTRICAL CODE 2011 POCKET GUIDE FOR RESIDENTIAL ELECTRICAL INSTALLATIONS

National Fire Protection Association, Quincy, Massachusetts

© 2011, Paperback, 9780877659655



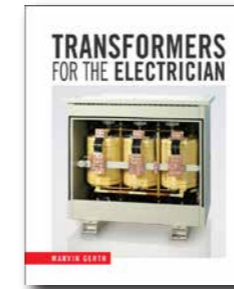
Whether you're in a classroom, on a jobsite, in an office, or even on the road—the code requirements are never far away with the compact yet resourceful NEC® 2011 Pocket Guide for Residential Electrical Installations, your guide to safe, accurate, and efficient home electrical installations.

TRANSFORMERS FOR THE ELECTRICIAN

Marvin Gerth, Anoka Technical College

© 2011, 192pp, Paperback, 9781435482395

ebook



Today's electrical students are looking for a resource that moves beyond traditional textbooks to get more than just transformer theory, but also the practical information that can be put to use in everyday situations once they enter the world of work. TRANSFORMERS

FOR THE ELECTRICIAN is the perfect solution! Written in a conversational style that minimizes technical jargon in favor of laymen's terms, the book presents a solid, comprehensive theoretical background of transformer operation, exploring its most important concepts through real-world examples, practical maintenance procedures, and pertinent National Electrical Code® rules. The end result: students will gain a thorough understanding of the critical information that a successful working electrician needs in order to connect, troubleshoot, and size just about any type of transformer.

CONTENTS

1. Transformer theory.
2. Transformer calculations and transformer losses.
3. Single phase transformers.
4. Three phase transformers.
5. Special types of transformers.
6. Transformer construction and maintenance.
7. NEC transformer requirements.

DATA, VOICE AND VIDEO CABLING, 3E

Jim Hayes, The Fiber Optic Association; Paul Rosenberg, Iowa State University

© 2009, 324pp, Paperback, 9781428334724

ebook



Cabling is one of the fastest changing technologies, and Data, Voice and Video Cabling, 3rd Edition, has been updated to address all the latest developments in premises cabling, including technologies and applications in copper, fiber, and wireless cabling. This text is organized

to aid in the understanding of cabling, by following a logical format that covers background information on communications systems and media first, and then delves into more detailed discussions on each media type: copper, wireless, and fiber. Separating the key concepts into specific sections also helps to minimize confusion between the unique installation practices among the different technologies. Within each section, topics progress from the basics to components, installation, and testing to assist in the development of individual skills. This book also provides readers with important background and resources regarding the most recent cabling standards, which are an integral part of this fast-paced industry.

CONTENTS

- Part 1. Introduction to Data, Voice, and Video Cabling. 1. The History of Telecommunications. 2. The Technology of Communications. 3. Overview of Wiring Installations. 4. Structured Cabling. Part 2. Copper Wiring. 5. Telephone Wiring. 6. Video System Installations. 7. Network Cabling. 8. Cabling for Wireless Networks. 9. Testing Voice, Data, and Video Wiring. 10. Wiring Termination Practices. Part 3. Fiber Optics. 11. Fiber Optic Cabling Systems. 12. Optical Fiber and Cable. 13. Fiber Optic Connectors and Splices. 14. Fiber Optic Testing. 15. Fiber Optic Installation Practices. Part 4. The Business of Data, Voice, and Video Cabling. 16. Business Issues.

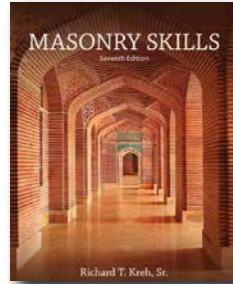
MASONRY

MASONRY SKILLS, 7E

Richard T. Kreh, Sr., Author & Consultant, Masonry

© 2015, 512pp, Hardback, 9781285426839

ebook



MASONRY SKILLS, Seventh Edition, provides you with a comprehensive, reader-friendly guide to the masonry trade, covering fundamental principles, basic practices, advanced techniques, and new trends and developments in both residential and commercial

masonry. Meticulously revised, the new edition includes the latest developments in the field, including current OSHA requirements, advances in construction technology and techniques, and a focus on sustainable building materials and processes. Featuring two full-color sections of finished projects, a new engaging design, and a wealth of new photos, the seventh edition seeks to inspire and educate both new and practicing masons. Approved and field-tested by professionals, this text is an ideal resource for anyone seeking the specialized knowledge and skills needed to succeed in the masonry industry.

CONTENTS

Introduction. Part I: SAFETY PRACTICES, TOOLS, EQUIPMENT, AND BASIC TOOL SKILLS. 1. Safety on the Job. 2. Basic Tools of the Masonry Trade. 3. Learning to Use the Basic Tools. 4. Related Masonry Equipment. Part II: DEVELOPMENT AND MANUFACTURE OF BRICK AND CONCRETE MASONRY UNITS. 5. Development of Clay and Shale Brick. 6. Manufacture of Brick. 7. Development of Concrete Block. 8. Manufacture of Concrete Block Masonry Units. Part III: LAYING BRICK TO A LINE AND BUILDING A BRICK CORNER. 9. Mixing Mortar. 10. Laying Brick to the Line. 11. Building the Brick Corner. Part IV: MORTAR AND ESSENTIALS

OF BONDING. 12. Development of Mortar. 13. Types of Mortar and Their Characteristics. 14. Introduction to Bonding. 15. Traditional Structural and Pattern Bonds. Part V: LAYING CONCRETE BLOCK. 16. Laying Concrete Block to the Line. 17. Building the Block Corner. 18. Bonding Concrete Block and Rules for Bonding. Part VI: ESTIMATING BRICK AND CONCRETE BLOCK BY RULE OF THUMB MATH AND CUTTING WITH THE MASONRY SAW. 19. Estimating Brick Masonry by Rule of Thumb. 20. Estimating Concrete Block Masonry by Rule of Thumb. 21. Cutting with the Masonry Saw. Part VII: MASONRY PRACTICES AND DETAILS OF CONSTRUCTION. 22. Building a Composite Wall of Brick and Concrete Block. 23. Cavity and Reinforced Masonry Walls. 24. Masonry Supports, Chases, and Bearings. 25. Movement Joints and Intersecting Walls. 26. Installing Anchor Bolts, Brick Corbelling, and Wall Copings. 27. Glass Block Masonry. Part VIII: SCAFFOLDING AND CLEANING MASONRY WORK. 28. Types of Scaffolding. 29. Safety Rules for Erecting and Using Scaffolding. 30. Cleaning Brick and Concrete Block. 31. Removing Various Stains from Masonry Walls. Part IX: CHIMNEYS AND FIREPLACES. 32. One Flue Chimney. 33. History, Theory, and Function of a Fireplace and Chimney. 34. Design and Construction of Fireplaces and Chimneys. 35. Multiple-Opening and Heat Circulating Fireplaces. Part X: ARCHES. 36. Development of Arches. 37. Construction of Semi-Circular and Segmental Arches. 38. Construction of a Jack Arch. Part XI: CONCRETE. 39. Concrete Forms and Placing Footings. 40. Essentials of Concrete Work. Part XII: UNDERSTANDING AND READING CONSTRUCTION DRAWINGS. 41. Line and Symbol Identification. 42. The Working Drawings. 43. Dimensions and Scales. Part XIII: MASONRY AS A CAREER AND SELECTED MASONRY PROJECTS. 44. Masonry as a Career. 45. Selected Masonry Projects. Appendix: Additional Resources. Glossary (English and Spanish).

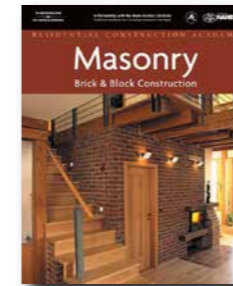
RESIDENTIAL CONSTRUCTION ACADEMY

Masonry, Brick and Block Construction

Robert Benjamin Ham

© 2008, 576pp, Hardback, 9781418052843

ebook



A valuable addition to the popular Residential Construction Academy series, this book introduces and explains modern residential masonry construction procedures, as well as current building and construction industry safety regulations relevant to the field. Beginning

masons, designers, homebuilders, students, and apprentices alike will benefit from the clear diagrams and step-by-step procedures. With technical information from nationally recognized trade associations like the National Association of Home Builders, Masonry Brick and Block Construction is a "must-have" for the aspiring mason.

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Chapter 1 Brick Positions and Sizes Chapter 2 Brick Bonds and Patterns Chapter 3 Masonry Hand Tools Chapter 4 Masonry Construction Equipment Chapter 5 Laying Brick to the Line Chapter 6 Constructing Brick Leads Chapter 7 Masonry Spacing Scales Chapter 8 Masonry Mortars Chapter 9 Concrete Masonry Units Chapter 10 Laying Block to the Line Chapter 11 Constructing Block Leads Chapter 12 Estimating Masonry Materials Chapter 13 Residential Footings and Foundations Chapter 14 Constructing Water-Resistant Walls Chapter 15 Brick Veneer Construction Chapter 16 Composite and Cavity Walls Chapter 17 Brick Paving Chapter 18 Steps, Stoops, and Porches Chapter 19 Piers, Columns, Pilasters, and Chases Chapter 20 Appliance Chimneys Chapter 21 Masonry Fireplaces Chapter 22 Brick Masonry Arches Chapter 23 Cleaning Brick and Concrete Masonry Chapter 24 Residential Masonry As A Career Chapter 25 Safety for Masons Chapter 26 Reading Drawings and Plans

PLUMBING

BASIC PLUMBING SERVICES SKILLS: GAS SERVICES, 2E

Owen Smith, TasTAFE

© 2016, 448pp, Paperback, 9780170361996

ebook



Become a competent, knowledgeable gas plumber. Employability boxes outline your responsibilities, including skills you need to acquire and real-life challenges you may face at work. You will learn better with help from the companion website

featuring additional study and revision tools, including worksheets, weblinks, crosswords and more. Addresses AQF Level 3 competencies of the Construction, Plumbing and Services Training Package (CPC08), and covers new Australian Industry Standard AS/NZS 5601:2013. Includes:

- CPCPGS3046A: Install LPG systems in caravans, mobile homes and mobile workplaces
- CPCPGS3047A: Install LPG systems in marine craft
- CPCPGS3048A: Install gas pressure control equipment
- CPCPGS3049A: Install Type A gas appliance flues
- CPCPGS3051A: Purge consumer piping
- CPCPGS3053A: Disconnect and reconnect Type A gas appliances
- CPCPGS3054A: Calculate and install natural ventilation for Type A gas appliances
- CPCPGS3056A: Install gas piping systems
- CPCPGS3057A: Size consumer gas piping systems
- CPCPGS3059A: Install LPG storage of aggregate storage capacity up to 500 litres
- CPCPGS3061A: Install and commission Type A gas appliances
- CPCPGS3050A: Install Type B gas appliance flues
- CPCPGS3052A: Maintain Type A gas appliances
- CPCPGS3055A: Install gas sub-meters
- CPCPGS3060A: Install LPG storage of aggregate storage capacity exceeding 500 litres and less than 8KL

The Plumbing Skills series provides you with the knowledge, skills and awareness you will need to

be successful in the plumbing industry. The series is structured to build step-by-step knowledge, working from general/foundation subjects towards more specific and technical detail as you progress. References to AS/NZS 3500:2015, referred to in the Plumbing Code of Australia, prompts familiarity with the codes throughout your training.

CONTENTS

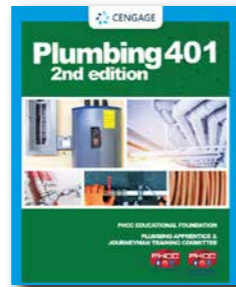
Part A: Gas fundamentals 1. Fuel gases 2. Gas industry terms and units of measurement 3. Gas distribution systems 4. Gas constituents and characteristics 5. Gas industry workplace safety 6. Combustion principles 7. Basic gas control systems 8. Meters 9. LPG basics Part B: Installation practice 10. Materials, components and pipe sizing 11. Piping systems 12. Purging a large volume gas installation 13. Appliance installation and maintenance 14. Ventilation requirements 15. Flueing 16. LPG installations 17. Caravan and marine gas installation 18. Planning a gas installation

PLUMBING 401, 2E

PHCC Educational Foundation Plumbing Apprentice & Journeyman Training Committee; Ed Moore, York Technical College

© 2020, 464pp, Paperback, 9781337391832

CENGAGE | MINDTAP **ebook**



Created in partnership with the Plumbing-Heating-Cooling Contractors National Association Educational Foundation (PHCC) and designed for your fourth-year of plumbing apprenticeship, PLUMBING 401, Second Edition, uses a clear, reader-friendly

writing style to help you gain a thorough understanding of advanced plumbing systems. Coverage spans residential, commercial, industrial, and institutional settings and includes important topics such as service and repair, blueprint reading, installation practices, heating systems, and related science and plumbing codes (both International and Uniform). Highly practical in its approach, this series breaks down complex plumbing applications into easy-to-understand principles while introducing you to a wide variety of plumbing scenarios using engaging text and full-color illustrations. In addition to abundant examples illustrating real-world solutions to common plumbing problems, the text features a strong emphasis on safety and the latest plumbing technology. Equally valuable for both apprentice and licensed plumbers, this trusted guidebook is an ideal resource to prepare you for career success. Check out our free app DEWALT® Mobile Pro™, a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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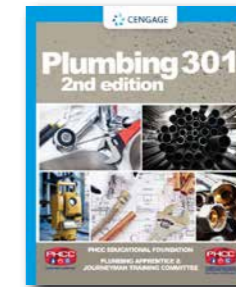
1. Service and Repair: Fixtures. 2. Service and Repair: Water and Fuel Gas Distribution. 3. Service and Repair: DWV Systems. 4. Service and Repair: DWV Systems. 5. Sizing Potable Water Lines and Fuel Gas Piping Systems. 6. Indirect and Special Wastes. 7. Protection of the Water Supply. 8. Steam Heating. 9. Hydronic Heating and Controls. 10. Forced Air Heating and Alternative Heating Systems. 11. Pumps. 12. Blueprints, Isometrics, and Material Take-Off. 13. Plumbing Codes: Administration and General Requirements. 14. Plumbing Codes: Fixtures and Fixture Fittings. 15. Plumbing Codes: Water Heaters. 16. Plumbing Codes: Water Supply and Distribution. 17. Plumbing Codes: Sanitary Drainage. 18. Plumbing Codes: Indirect Wastes. 19. Plumbing Codes: Vents. 20. Plumbing Codes: Traps and Interceptors. 21. Plumbing Codes: Storm Drainage. 22. Plumbing Codes: Fuel Gas Piping. 23. Plumbing Codes: Healthcare Facilities and Medical Gas and Vacuum Systems. 24. Plumbing Codes: Nonpotable Water Systems.

PLUMBING 301, 2E

PHCC Educational Foundation Plumbing Apprentice & Journeyman Training Committee; Ed Moore, York Technical College

© 2018, 576pp, Paperback, 9781337391764

CENGAGE | MINDTAP **ebook**



Designed for your third year as a plumbing apprentice, PLUMBING 301, Second Edition, combines a visually appealing, full-color design, clear writing style, and the most current plumbing and gas code references to give you everything you need to know for both commercial

and residential plumbing. Coverage begins with basic installation practices; progresses to blueprint reading, the National Fuel Gas Code, and surveying instruments; and includes special chapters devoted to the math and science of plumbing. The Second Edition builds on this thorough foundation with new discussions of hydronic systems, LP gas systems, ejector systems, water treatment, and electrical controls and wiring, plus enhanced content on preplanning and electrical controls. Now better than ever, this valuable text gives you the tools you need to be successful as you continue your journey into the plumbing industry. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

CONTENTS

1. Pre-planning, Productivity and Profitability. 2. Residential Fixtures and Appliances. 3. Commercial, Industrial and Institutional Fixtures and Appliances. 4. Installation Methods. 5. Fixture Fittings and Trim. 6. Principles of Hydronic Systems. 7. Blueprints and Specifications. 8. Drawing Types, Floor Plans and Site Plans. 9. Structural, Plumbing, Electrical, HVAC and Detail Plans. 10. National Fuel Gas Code, Materials and Types of Fuel Gases. 11. Fuel Gas

Piping, Fittings, Connections and Pipe Sizing. 12. Gas Appliances, Regulators, Meters and Appliance Controls. 13. Vents for Category I Appliances. 14. Fundamentals of LP. 15. Level Transit, Elevations and Grade. 16. Builders Level and Transit. 17. Offsets and Ratios. 18. Tank Capacities, Volume and Weight of Water. 19. Storm Drainage and Sizing Storm Drains. 20. Cross Connections. 21. Ejector Systems. 22. Energy and Temperature, Piping Expansion, Heat Transfer, Insulation, Humidity and Condensation. 23. Water Treatment. 24. Heat Sources for Water Heaters and Ancillary Piping. 25. Basic Electricity, Electric Current and Electric Motors. 26. Electric Circuits, Circuit Protection, Control Wiring and Electrical Safety. 27. Electric Circuit Troubleshooting.

RESIDENTIAL CONSTRUCTION ACADEMY, 3E

Facilities Maintenance: Maintaining, Repairing, and Remodeling

Kevin Standiford, Arkansas Teacher Retirement System, Little Rock, AR, Lead Program Analyst

© 2014, 592pp, Paperback, 9781133282433

ebook



Created in partnership with the Home Builders Institute (HBI), the workforce development arm of the National Association of Home Builders (NAHB), the Residential Construction Academy Series is the only program based on the National Skill Standards for

residential construction. Step-by-step illustrations and an easy-to-read writing style make RESIDENTIAL CONSTRUCTION ACADEMY: FACILITIES MAINTENANCE, 3E the powerful tool you need for any facilities maintenance course. This edition walks you through a straightforward approach that describes common maintenance tasks in detail, like carpentry, wiring, groundskeeping, appliance repair, painting, plumbing, and HVAC. Enhanced chapters on basic math and blueprint reading give you the most comprehensive training available. See the last three chapters for your energy efficiency concerns, two chapters on Weatherization and one on Solar. Plus, each section emphasizes safety and highlights the skills you can build that employers are searching for. RESIDENTIAL CONSTRUCTION ACADEMY: FACILITIES MAINTENANCE, 3RD is the manual you need to develop a solid foundation in facilities maintenance.

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1. Customer Service Skills. 2. Methods of Organizing, Trouble-shooting, and Problem Solving. 3. Applied Safety Rules. 4. Fasteners, Tools, and Equipment. 5. Practical Electrical Theory. 6. Electrical Facilities Maintenance. 7. Carpentry. 8.

Surface Treatments. 9. Plumbing. 10. Heating, Ventilation, and Air-Conditioning Systems. 11. Appliance Repair and Replacement. 12. Trash Compactors. 13. Elevators. 14. Pest Prevention. 15. Landscaping and Groundskeeping. 16. Basic Math for Facilities Maintenance Technicians. 17. Blueprint Reading for Facility Maintenance Technicians. 18. Weatherization Concepts. 19. Weatherization Installation, Maintenance and Repair. 20. Solar Systems, Maintenance and Repair.

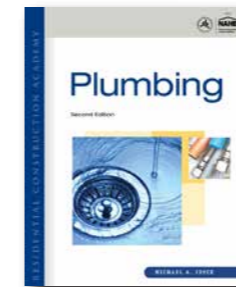
RESIDENTIAL CONSTRUCTION ACADEMY, 2E

Plumbing

Michael A. Joyce; Ray Holder

© 2012, 640pp, Hardback, 9781111307776

ebook



RESIDENTIAL CONSTRUCTION ACADEMY: PLUMBING, 2E is the ideal book to create a direct link between your education/training program and the residential construction industry. The result of a strategic partnership between the

National Association of Home Builder's (NAHB) Home Builders Institute and Delmar, Cengage Learning, the Residential Construction Academy Series is the perfect way to learn essential workplace skills for readers new to the building trades. Written in partnership with the Home Builders Institute, and endorsed by NAHB, RESIDENTIAL CONSTRUCTION ACADEMY: PLUMBING, 2E provides a step-by-step approach to residential plumbing installations based on national skill standards. Focusing on "Green" advancement in the plumbing trades, this book thoroughly explains the process of installing residential plumbing systems by exploring topics such as tools of the trade and proper safety measures and by offering various tips to increase

readers' on-the-job productivity. Logically organized to build a foundation of knowledge, this book progresses from the installation of common fixtures to troubleshooting techniques that will aid readers. An emphasis on creative layout and the importance of understanding code variations will foster readers' understanding of plumbing system installation that is based on typical situations as well as unique jobsite conditions.

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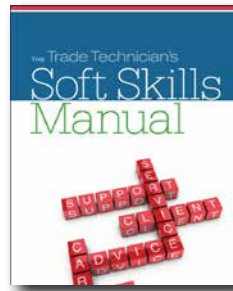
1. Tools and Materials. 2. Hand Tools. 3. Power Tools. Pipe. Fittings. 4. Valves and Device. 5. Fixtures and Equipment. 6. Fixtures. 7. Faucets and Drain Assemblies. 8. Equipment Layout and Installation. 9. Blueprint Reading and Drafting. 10. Layout and Material Organization. 11. Water Service Installation. 12. Water Distribution Installation. 13. Drainage Waste and Vent Segments. 14. Drainage Waste and Vent Installation. 15. Fixture and Equipment Installation. 16. Troubleshooting. 17. Plumbing Repairs and Troubleshooting. 18. Hydronic Heating Systems.

THE TRADE TECHNICIAN'S SOFT SKILLS MANUAL

Steve Coscia

© 2012, 128pp, Paperback, 97811111313814

CENGAGE | MINDTAP **ebook**



Learning to express yourself in a positive and professional way can be an art-form. THE TRADE TECHNICIAN'S SOFT SKILLS MANUAL, teaches these important soft skills with line drawings, photographs, and anecdotes from real case

studies. This approach makes the subject area approachable and engaging. The anecdotes are followed by explanations of proven service behaviors, along with proven standards, practice tips, forms, documents and checklists complete the text to teach you the fine art of customer service. Based on more than 30 years of studies and field research, this text teaches the skills you need to advance in your careers and differentiate yourself from others in their field. THE TRADE TECHNICIAN'S SOFT SKILLS MANUAL is written by Steve Coscia, a motivational speaker who managed a technical support team for more than 20 years and has used these techniques and practices to advance his own career as an industry expert.

CONTENTS

Preface. Introduction. Halos and Hygiene. The Customer is Always Right. Customers and Congruency. Editorializing and Empathy. Listening & Learning. Clutter and Clarity. Fearlessness and Finesse (listen skills chapter). Appendix (Checklists & Forms).

BLUEPRINT READING AND DRAFTING FOR PLUMBERS, 2E

Michael A. Joyce

© 2009, 240pp, Paperback, 9781428335134

ebook



With a one-of-a-kind approach that offers more comprehensive coverage than any other plumbing apprentice book on the market, this valuable resource will thoroughly prepare readers for the transition from the residential plumbing

industry to commercial or industrial projects. Blueprint Reading and Drafting for Plumbers, 2E goes beyond basic lessons on reading and drafting various piping arrangements to provide highly detailed, practical, and relevant information that addresses the real-life demands of commercial and industrial job sites. This updated edition features all-new chapters devoted to coordinating plumbing installations using structural steel and civil blueprints, further enhancing the book's unique and jobsite-focused classroom lessons.

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Chapter 1: Blueprint Symbols and Abbreviations
Chapter 2: Drafting Tools
Chapter 3: Architectural Blueprints and Project Documents
Chapter 4: Structural Steel and Civil Blueprints
Chapter 5: Isometric Introduction and View Comparisons
Chapter 6: Shop Drawings
Chapter 7: Riser Diagrams
Chapter 8: Drafting Practice
Appendix A: Abbreviations and Mathematical Tables
Appendix B: Common Plumbing Fittings

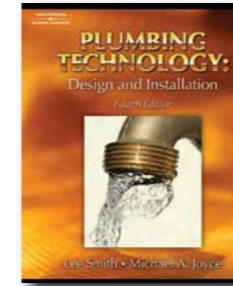
PLUMBING TECHNOLOGY, 4E

Design and Installation

Lee Smith; Michael A. Joyce

© 2008, 576pp, Hardback, 9781418050917

ebook



Prepare for a career in the commercial or residential plumbing fields with this popular book, which has been updated to reflect the very latest advancements in the plumbing industry. Plumbing Technology: Design and Installation, 4E has also been restructured to begin with

instruction on the major, introductory concepts, and then progressing to more specific, advanced lessons, allowing readers a complete and thorough understanding of the material. This edition includes coverage of the very latest products, tools, codes, and drain cleaning equipment that have had a remarkable impact on the plumbing industry and how plumbers work successfully. The latest water heater technology, such as Flammable Vapor Ignition Resistant heaters, DWV system segments and sizing, new safety regulations, and all relevant code changes are also addressed.

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Chapter 1 Plumbing Basics
Chapter 2 Safety
Chapter 3 Pipe, Valves, and Fittings
Chapter 4 Blueprint Reading and Drafting
Chapter 5 Trade Math and Formulas
Chapter 6 Fixture Types
Chapter 7 Faucets and Drain Assemblies
Chapter 8 Fixture Installation
Chapter 9 Introduction to Water Supply
Chapter 10 Water Supply Installations
Chapter 11 Water Heater Theory and Principles
Chapter 12 Water Heater Types and Installations
Chapter 13 Water Heater Devices
Chapter 14 DWV System Identification
Chapter 15 DWV Layout Considerations
Chapter 16 Drainage, Waste and Vent Systems
Chapter 17 Roof Drain Systems and Sewer and Drain Cleaning
Chapter 18 Sizing Drainage, Waste, and Vent Systems
Chapter 19 Sizing Natural Gas Piping, Water Piping, and Water Heaters

CAD/DRAFTING/ENGINEERING GRAPHICS

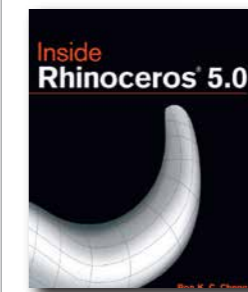
ANIMATION

INSIDE RHINOCEROS 5, 4E

Ron K.C. Cheng, Hong Kong Polytechnic University

© 2014, 592pp, Paperback, 9781111124915

ebook



INSIDE RHINOCEROS 5, is a well-designed introduction to using the latest version of Rhino. This book bridges the gap between theoretical and software-oriented approaches to computer modeling by providing a balanced presentation of theory, concepts, and hands-on tutorials. It begins

with an overview of the Rhinoceros5interface and progresses to explore wireframe models and the construction of curves. This book contains an in-depth examination of surface modeling, taking you step-by-step through surfaces construction using Rhino and discusses in detail solid modeling methods, rendering, engineering drawing, and outputting to various file formats. INSIDE RHINOCEROS 5, concludes with a set of projects aimed at allowing you to apply Rhino in real world design situations.

CONTENTS

Case Study 1. Bubble Car Case Study. Case Study 2. Jewelry Design Case Studies. 1. Rhinoceros Functions, User Interface, and Basic Operating Methods. 2. Rhinoceros NURBS Surface Construction and Manipulation. 3. Mesh Object Construction and Manipulation. 4. Object Transformation. 5. Group, Block, and Work Session. 6. Drawing Output and Data Exchange. 7. Rendering. Appendices: Digital Modeling Concepts and Construction Plane Concepts.

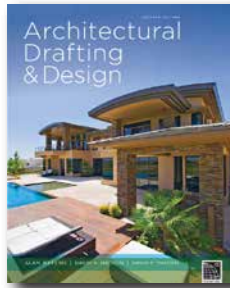
ARCHITECTURAL DRAFTING

ARCHITECTURAL DRAFTING AND DESIGN, 7E

Alan Jefferis, Clackamas Community College; David A Madsen; David P. Madsen

© 2017, 1152pp, Hardback, 9781285165738

CENGAGE | MINDTAP ebook



ARCHITECTURAL DRAFTING AND DESIGN, Seventh Edition, is the definitive text for beginning, intermediate, or advanced architectural CAD operators. This full-color, comprehensive edition covers the basics of residential design while

exploring numerous types of projects that a designer or architect is likely to complete during the design process. The Seventh Edition is up-to-date with content based on the most recent editions of relevant codes, including the 2015 International Residential Code (IRC), the 2015 International Building Code (IBC), the 2015 International Energy Conservation Code (IECC), and the 2012 International Green Construction Code (IgCC). The text opens with information on architectural styles that have dominated the field over the last four centuries, followed by basic design components related to site and structure. Commercial drafting, basic construction materials, common construction methods, and drawings typically associated with commercial construction are also covered. This bestseller complements informational content with practical, hands-on material, including step-by-step instructions for the design and layout of each type of drawing associated with a complete set of architectural plans—all presented via projects that can be completed using CAD drawing methods. This proven text equips readers with the knowledge and skills needed to complete the drawings that most municipalities require to obtain a building permit for a single-family residence.

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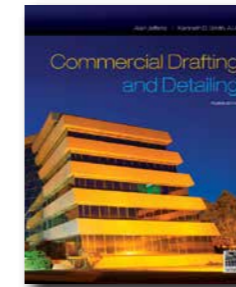
Preface. Acknowledgments. Prologue. Part I: INTRODUCTION TO ARCHITECTURAL DESIGN AND DRAFTING. 1. The World of Professional Architecture. 2. Architectural Drafting Format. 3. United States National CAD Standard. 4. Computer-Aided Design and Drafting in Architecture. 5. Architectural Lines and Text. 6. Sketching Applications. 7. Construction Procedures. Part II: RESIDENTIAL DESIGN. 8. Construction Specifications. 9. Guidelines and Required Codes that Affect Building Design. 10. Room Relationships and Sizes. 11. Exterior Design Factors. 12. Conservation and Environmental Design and Construction. Part III: SITE PLANNING. 13. Site Orientation. 14. Legal Descriptions and Site Plan Requirements. 15. Site Plan Layout. Part IV: THE FLOOR PLAN. 16. Floor Plan Symbols. 17. Floor Plan Dimensions and Notes. 18. Floor Plan Layout. Part V: SUPPLEMENTAL FLOOR PLAN DRAWINGS. 19. Electrical Plans. 20. Plumbing Plans. 21. Heating, Ventilating, and Air-Conditioning. Part VI: ROOF PLANS. 22. Roof Plan Components. 23. Roof Plan Layout. Part VII: ELEVATIONS. 24. Introduction to Elevations. 25. Elevation Layout and Drawing Techniques. 26. Millwork and Cabinet Technology, Cabinet Elevations, and Layout. Part VIII: FRAMING METHODS AND PLANS. 27. Environmentally Friendly Framing Methods. 28. Structural Components of Framed Construction. 29. Design Criteria for Structural Loading. 30. Sizing Joists and Rafters Using Span Tables. 31. Determining Beam Sizes. 32. Drawing Framing Plans. Part IX: FOUNDATION PLANS. 33. Foundation Systems. 34. Floor Systems and Foundation Support. 35. Foundation Plan Layout. Part X: WALL SECTIONS AND DETAILS. 36. Sectioning Basics. 37. Section Layout. 38. Alternative Layout Techniques. 39. Stair Construction and Layout. 40. Fireplace Construction and Layout. Part XI: COMMERCIAL DRAFTING. 41. Building Codes and Commercial Design. 42. Common Commercial Construction Materials. 43. Commercial Construction Projects. 44. Commercial Drafting. Glossary. Index.

COMMERCIAL DRAFTING AND DETAILING, 4E

Alan Jefferis, Clackamas Community College; Kenneth D. Smith

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The only book of its kind on the market today, COMMERCIAL DRAFTING AND DETAILING, 4E will give you everything you need to gain a solid understanding of commercial drafting and detailing - it's all here, in one comprehensive resource.

The fourth edition maintains the winning features of its previous editions; clear explanations and professional, practical examples that walk students through the architectural and structural drawings required in a complete set of commercial plans. It then builds on these successes by increasingly integrating design components into each chapter, replacing free-hand sketches with CAD skeleton drawings, and updating the information to reflect the 2015 International Building Code. The end result: a valuable tool that will keep you up-to-date on the most current industry trends and prepare you to succeed in the classroom and beyond.

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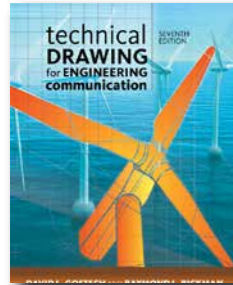
Part III. PREPARING ARCHITECTURAL AND CIVIL DRAWINGS. 13. Structural Considerations Affecting Construction. 14. Project Manuals and Written Specifications. 15. Land Descriptions and Drawings. 16. Floor Plan Components, Symbols and Development. 17. Orthographic Projection and Elevations. 18. Roof Plan Components and Drawings. 19. Drawing Sections. 20. Interior Elevations. 21. Ramp, Stair, and Elevator Drawings. Part IV. PREPARING STRUCTURAL DRAWINGS. 22. Drawing Framing Plans. 23. Drawings Structural Elevations, Sections and Details. 24. Foundation Systems and Components.

TECHNICAL DRAWING FOR ENGINEERING COMMUNICATION, 7E

David E. Goetsch, Northwest Florida State College; Raymond L. Rickman, Northwest Florida State College; William S. Chalk

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ebook



TECHNICAL DRAWING FOR ENGINEERING COMMUNICATION, 7E offers a fresh, modern approach to technical drawing that combines the most current industry standards with up-to-date technologies and software, resulting in a valuable,

highly relevant resource you won't want to be without. The book builds on features that made its previous editions so successful: comprehensive coverage of the "total technical drawing experience" that explores both the basic and advanced aspects of engineering and industrial technology and reviews both computer modeling and more traditional methods of technical drawing. Enhancements for the seventh edition include updates based on industry trends and regulations, an all-new chapter on employability skills, and additional content on SolidWorks 3D modeling software for drafting technicians. The end result is a tool that will give you the real-world skills needed for a successful career in CAD, drafting, or design.

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Preface. Part I: BASICS. Introduction. 1. Employability Skills for Drafting and Design Technician. 2. Drafting Tools: Conventional, CAD, and Solid Modeling. 3. Sketching and Lettering for Engineering Communication. 4. Geometric Construction. Part II: TECHNICAL DRAWING FUNDAMENTALS. 5. Spatial Visualization and Multiview Drawings. 6. Dimensioning and Notation. 7. Sectional Views. 8. Auxiliary Views. 9. Descriptive Geometry. 10. Patterns and Developments. 11. Solid/3D Modeling: Computational Design and Analysis. Part III: DESIGN DRAFTING APPLICATIONS. 12. Geometric

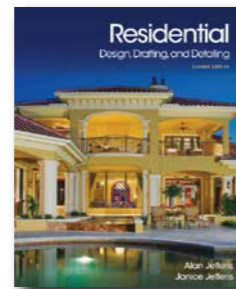
Dimensioning and Tolerancing. 13. Fasteners. 14. Springs. 15. Cams. 16. Gears. 17. Assembly and Detail Drawings for Design. 18. Pictorial Drawings. Part IV: RELATED TECHNOLOGIES, APPLICATIONS AND PROCESSES. 19. Welding. 20. Modern Manufacturing: Materials, Processes, and Automation. 21. The Design and Advanced Concepts. Appendix A: Tables. Glossary. Index.

RESIDENTIAL DESIGN, DRAFTING, AND DETAILING, 2E

Alan Jefferis, Clackamas Community College

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ebook



Master the skills most important for drawing, detailing, and designing residential structures with RESIDENTIAL DESIGN, DRAFTING, AND DETAILING, 2E. This step-by-step presentation centers exclusively on residential, familiarizing you

with standard construction practices involving wood, engineered materials, steel, and concrete as well as the latest "green" concepts and alternative materials. Updates throughout this edition reflect the latest standards, codes and guidelines, including the 2012 International Residential Code®. Focus on CAD techniques using the guidelines from the United States National CAD - Standard®--V5. Professional examples from architects, engineers, and designers as well as activities and problems using actual architectural drawings and designs place you in the role of a professional CAD technician.

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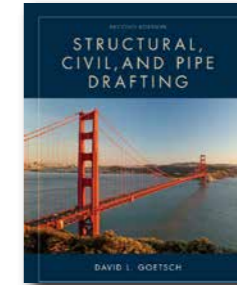
Success. 3. Computer-Aided Design in Architecture. 4. Guidelines and Codes and That Affect Building Design. 5. Interior Design Considerations. 6. Exterior Design Factors and Styles. 7. Environmental Design Considerations. Section II: SITE PLANS. 8. Land Descriptions and Drawings. 9. Site-Related Drawing Layout. Section III: FLOOR PLANS AND SUPPLEMENTAL DRAWINGS. 10. Floor Plans--Symbols, Annotation, and Dimensions. 11. Completing a Floor Plan with CAD. 12. Electrical Plans. 13. Plumbing Systems. 14. Comfort Control Systems. Section IV: ROOF PLANS. 15. Roof Plan Components. 16. Roof Plan Layout With CAD. Section V: ELEVATIONS. 17. Introduction to Elevations. 18. Elevation Layout and CAD Drawing Techniques. 19. Representing Interior Finishing Materials and Cabinets With CAD. Section VI: FRAMING METHODS AND PLANS. 20. Framing Methods. 21. Structural Components. 22. Design Criteria for Structural Loading. 23. Sizing Joists, Rafters, and Beams. 24. Drawing Framing Plans. Section VII: FOUNDATION PLANS. 25. Foundation Systems. 26. Floor Systems and Foundation Support. 27. Foundation Plan Layout. Section VIII: DETAILS AND SECTIONS. 28. Sectioning Basics. 29. Section Layout. 30. Stair Construction and Layout. 31. Fireplace Construction and Layout. Section IX: SUPPLEMENTAL DRAWINGS. 32. Written Specifications. 33. Presentation Drawings. 34. Renovations, Remodeling, and Additions. Abbreviations. Glossary. Index.

STRUCTURAL, CIVIL AND PIPE DRAFTING, 2E

David L. Goetsch, Okaloosa-Walton Community College, Niceville, Florida

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ebook



Rapidly changing infrastructure along with new products and manufacturing processes are making expertise in architectural, civil, pipe, and structural design increasingly essential for modern drafting professionals. Building on

decades of success with his acclaimed STRUCTURAL DRAFTING text, author David Goetsch created STRUCTURAL, CIVIL, AND PIPE DRAFTING to help you develop the specific knowledge and skills needed to succeed in a rapidly evolving, high-demand field. The text opens with an overview of structural drafting—from department organization to product fabrication and shipping—before exploring critical topics such as structural steel, pre-cast concrete, poured-in-place concrete, structural wood drafting, pre-fab metal buildings, civil engineering drafting, and process piping. Now thoroughly updated, the Second Edition features new and revised material reflecting the latest trends, technology, and applications, as well as more photographs and illustrations and improved CAD application exercises to enhance learning.

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1. OVERVIEW OF STRUCTURAL DRAFTING. Introduction to Structural Drafting. Typical Structural Drafting Department. Drawing, Checking, Correcting, and Revising Processes. Product Fabrication and Shipping. Structural Connectors. 2. STRUCTURAL STEEL DRAFTING. Structural Steel Framing Plans. Structural Steel Sections. Structural Steel Connection Details. Structural Steel Fabrication Details. Structural Steel Bills of Materials. Pre-Engineered Metal Building. 3. STRUCTURAL

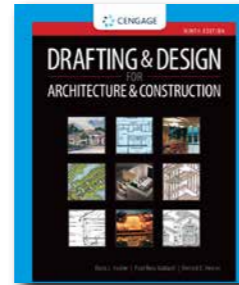
PRECAST CONCRETE DRAFTING. Precast Concrete Framing Plans. Precast Concrete Sections. Precast Concrete Connection Details. Precast Concrete Fabrication Details. Precast Concrete Bills of Materials. 4. STRUCTURAL POURED-IN-PLACE CONCRETE. Poured-in-Place Concrete Foundations. Poured-in-Place Concrete Walls and Columns. Poured-in-Place Concrete Floor Systems. Poured-in-Place Stairs and Ramps. 5. STRUCTURAL WOOD DRAFTING. Structural Wood Floor Systems. Structural Wood Walls. Structural Wood Roofs. Structural Wood Posts, Beams, Girders, and Arches. 6. CIVIL ENGINEERING DRAFTING AND PIPING. Property Maps and Plot Plans. Contour Lines, Profiles, and Roadwork. Quality Takeoffs and Calculations. Pipe Drafting. 7. EMPLOYMENT IN DRAFTING. Finding a Job and Succeeding in Drafting. Advanced Drafting Projects.

DRAFTING AND DESIGN FOR ARCHITECTURE & CONSTRUCTION, 9E

Dana J. Hepler; Paul Ross Wallach, Cañada College; Donald Hepler

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DRAFTING AND DESIGN FOR ARCHITECTURE AND CONSTRUCTION, 9th edition is written in a logical structure that presents architectural drafting and design concepts in the order usually practiced by professional architects. An emphasis on environmental

safety, protective measures, expanded coverage of construction design and drawings and chapter objectives to alert the reader to important concepts, allow you to hone the necessary skills to create a complete set of drawing plans. The abundant appendices provide important reference material, career information, mathematical calculations, standard abbreviations and synonyms. Exciting new material on design principles and procedures along with new entries on smart homes, smart growth, recreational facilities, building information modeling, site planning, ecology, energy conservation, efficiency and sustainability has been added. This text also covers CAD in an introductory chapter along with a series of inserts throughout to provide examples of how CAD is used to perform specific architectural drafting functions

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DRAFTING AND DESIGN FOR ARCHITECTURE AND CONSTRUCTION, INTERNATIONAL EDITION, 9E

Dana J. Hepler; Paul Ross Wallach, Cañada College; Donald Hepler

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DRAFTING AND DESIGN FOR ARCHITECTURE AND CONSTRUCTION, International Edition is written in a logical structure that presents architectural drafting and design concepts in the order usually practiced by professional architects. An

emphasis on environmental safety, protective measures, expanded coverage of construction design and drawings and chapter objectives to alert the reader to important concepts, allow you to hone the necessary skills to create a complete set of drawing plans. The abundant appendices provide important reference material, career information, mathematical calculations, standard abbreviations and synonyms. Exciting new material on design principles and procedures along with new entries on smart homes, smart growth, recreational facilities, building information modeling, site planning, ecology, energy conservation, efficiency and sustainability has been added. This text also covers CAD in an introductory chapter along with a series of inserts throughout to provide examples of how CAD is used to perform specific architectural drafting functions.

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7. Indoor Living Areas. 8. Outdoor Living Areas. 9. Traffic Areas and Patterns. 10. Kitchens. 11. General Service Areas. 12. Sleeping Areas. PART IV: BASIC ARCHITECTURAL DRAWINGS. 13. Site Development Plans. 14. Designing Floor Plans. 15. Drawing Floor Plans. 16. Designing Elevations. 17. Drawing Elevations. 18. Sectional, Detail, and Cabinetry Drawings. PART V: PRESENTATION METHODS 19. Pictorial Drawings. 20. Architectural Renderings. 21. Architectural Models. PART VI: FOUNDATIONS AND CONSTRUCTION SYSTEMS. 22. Principles of Construction. 23. Foundations and Fireplace Structures. 24. Wood-Frame Systems. 25. Masonry and Concrete Systems. 26. Steel and Reinforced-Concrete Systems. 27. Disaster Prevention Design. PART VII: FRAMING SYSTEMS 28. Floor Framing Drawings. 29. Wall Framing Drawings. 30. Roof Framing Drawings. PART VIII: ELECTRICAL AND MECHANICAL DESIGN DRAWINGS. 31. Electrical Design and Drawing. 32. Comfort Control Systems (HVAC). 33. Plumbing Drawings. PART IX: DRAWING MANAGEMENT AND SUPPORT SERVICES. 34. Drawing Management. 35. Schedules and Specifications. 36. Building Costs and Financial Planning. 37. Codes and Legal Documents. APPENDIXES Appendix A: Careers in Architecture and Related Fields. Appendix B: Mathematical Calculations. Appendix C: Architectural Abbreviations and Professional Organizations. Appendix D: Architectural Synonyms. Glossary. Index.

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The Big Idea: Safe Houses. Technology: Town on the Move. How to Help: Don't Fan the Flames. My Seven: What We Learn from Deadly Quakes Physical Change. Tunnel Vision. Up On the Roof. The New Great Walls. Saving Energy: It Starts at home. Next: Simulating Wildfires. Technology: Full Tilt. Kazakhstan's Tomorrowland. Village Green Biomimetics.

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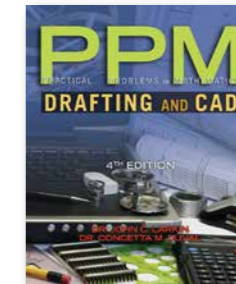
Can China Go Green. Iceland's Power Struggle. Plugging into the Sun. Can Solar Save Us. The 21st Century Grid. Future Power. The Big Idea: Get the Salt Out. High Marks for Clean Water. The Deep Dilemma. Next: Space Elevator. Environment: London's Green Giant. Up on the Roof.

PRACTICAL PROBLEMS IN MATHEMATICS FOR DRAFTING AND CAD, 4E

John Larkin; Concetta Duval

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Designed to enhance your math skills in the field of drafting, this completely updated fourth edition of Practical Problems in Mathematics For Drafting and CAD presents a comprehensive overview of contemporary drafting problems, CAD drawings,

and industry applications and practices. This text provides a variety of integrated math problems and CAD operations in order to facilitate critical thinking, problem solving, and basic mathematics literacy. Filled with real-world applications and designed to cover a range of skills and levels of difficulty, the fourth edition includes updated figures, illustrations, problem sets, examples, and solutions in order to give you the skills you need to succeed in the field of drafting.

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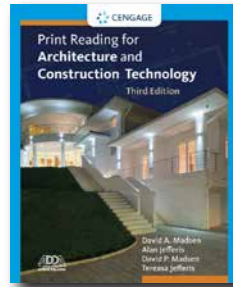
1. Whole Numbers. 2. Fractions. 3. Decimals. 4. Decimals, Fractions, and Percents. 5. Geometry Fundamentals. 6. Measurement. 7. Algebra. 8. Applied Trigonometry. 9. Geometric Dimensioning and Tolerancing.

PRINT READING FOR ARCHITECTURE AND CONSTRUCTION TECHNOLOGY, 3E

David A Madsen; Alan Jefferis, Clackamas Community College; David P. Madsen; Tereasa Jefferis, Mt. Hood Community College

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PRINT READING FOR ARCHITECTURE AND CONSTRUCTION TECHNOLOGY, 3E provides the knowledge and skills needed to accurately interpret blueprints for residential and light commercial construction.

This easy-to-use text explores all facets of print reading, with examples and illustrations taken from actual architectural prints. You are provided with the information you need to create high-quality, standardized “real world” working drawings. In addition, this edition is fully updated with CADD-generated print reading examples, illustrations, and exercises that comply with the highest industry standards of computer-aided design and drafting.

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1. Introduction to Architectural and Construction Technology Print Reading. 2. Reading Site Plans. 3. Reading Floor Plans, Part 1: Floor Plan Symbols. 4. Reading Floor Plans, Part 2: Floor Plan Dimensions. 5. Reading Floor Plans Part 3: Electrical, Plumbing and HVAC. 6. Reading Elevations. 7. Reading Millwork Details and Cabinet Elevations. 8. Reading Framing Methods, Structural Components and Framing Plans. 9. Reading Roof Related Drawings. 10. Foundations and Floor Systems. 11. Reading Sections and Details. 12. Reading Stair Drawings. 13. Reading Fireplace Drawings. 14. Construction Specifications and Energy Efficient Construction Applications Appendix A. Appendix B. Glossary. Abbreviations.

PROJECT LEAD THE WAY: CIVIL ENGINEERING AND ARCHITECTURE

Donna Matteson, State University of New York at Oswego; Deborah Kennedy, Curriculum Director, PLTW; Stuart Baur, Missouri University of Science and Technology; Eva Kultermann, College of Architecture, Illinois Institute of Technology

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Based on the innovative Project Lead the Way (PLTW) curriculum, this dynamic new text is designed to prepare you for college and career success in science, technology, engineering, and math (STEM). Whether you are interested in becoming an

engineering or architecture professional, or simply want to understand the structural systems and building styles in your community, this text will help you develop the technological literacy to appreciate, describe, and make informed decisions about our built environment. As an integrated part of your school's PLTW program or a personal resource, CIVIL ENGINEERING AND ARCHITECTURE is an ideal choice to support your STEM success. This book provides a richly illustrated history of architectural styles and the engineering achievements that produced them, as well as detailed coverage of the principles and concepts that current professionals use to shape today's built environment. From site discovery through landscaping, the text provides a wealth of step-by-step examples and exercises, plentiful case studies and career profiles, and engaging articles and activities to help students build their knowledge while developing essential problem-solving skills.

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1. Definitions and History of Civil Engineering and Architecture. 2. Careers. 3. Research, Documentation, and Communication. 4. Architectural Design. 5. Site Discovery for Viability Analysis. 6. Site Planning. 7. Site Design. 8. Energy Conservation

and Design. 9. Residential Space Planning. 10. Commercial Space Planning. 11. Dimensioning and Specifications. 12. Building Materials and Components. 13. Framing Systems: Residential and Commercial Applications. 14. Structural Systems: What Makes a Building Stand? 15. Planning Electric Codes. 16. Planning for Plumbing. 17. Indoor Environmental Quality and Security. 18. Landscaping. 19. Visual Communication of Design Intent. 20. Formal Communication and Analysis.

STRUCTURAL STEEL DRAFTING AND DESIGN, 2E

David C. MacLaughlin, Chippewa Valley Technical College; Hector Estrada

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Practical and easy to use, this text lays a solid groundwork for beginning and intermediate students to pursue careers in architecture, construction, or civil engineering. The text clarifies the vital interdependence between structural steel design and fabrication drawings, equipping students to work flexibly with both. First and foremost a drafting book, Structural Steel Drafting and Design gives an overview of structural design theory while providing numerous examples, illustrations, and real-world assignments. Students also become acquainted with critical tables and reference material from industry-standard sources, as well as the merits of Load and Resistance Factor Design and Allowable Strength Design.

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Structural Steel Design Drawing For Steel Construction Steel: An Economical Choice For Commercial And Industrial Buildings: Introduction,

Steel Frame Construction, The Economy Of Steel Frame Construction, Load Resistance Factor Design, Summary, Study Questions. An Introduction To The World Of Structural Steel: Introduction, Steel As A Structural Material, Common Structural Steel Rolled Shapes, The Manual Of Steel Construction, Open-Web Steel Joists, Steel Joist Institute Load Tables, Summary, Study Questions. The Structural Drafter In The Structural Engineering Design Or Fabricator's Office: Introduction, Structural Engineering, Desirable Characteristics Of The Structural Drafter, Engineering Office Organization, Summary, Study Questions. Reading Architectural Drawings For Steel-Framed Buildings: Introduction, Architectural Materials And Symbols, Architectural Floor Plans, Exterior Elevations, Building Sections, Architectural Wall Sections And Details, Summary, Study Questions. An Overview Of Basic Structural Steel Design Calculations: Introduction, Basic Structural Design Considerations And Terminology, The Design And Selection Of Open-Web Steel Joists, The Design And Selection Of W-Shape (Wide Flange) Beams And Girders, The Design Of Beam Bearing Plates, The Design Of Steel Columns, The Design Of Column Baseplates, Summary, Study Questions. The Preparation Of Structural Steel Design Drawings And Details: Introduction, The Basic Objectives Of Structural Design, The Structural Steel Grid System, Structural Steel Sections, Structural Steel Details, Summary, Study Questions. Structural Steel Sections And Details For Commercial And Industrial Buildings : Structural Steel Fabrication Drawings For Steel Construction The Structural Designer/Fabricator Relationship, An Introduction To Structural Steel Shop Drafting, Column Detailing, Structural Connections, Beam Detailing, Anchor Rods and Anchor Rod Plans, The Steel Erection Plan, The Field Bolt List, An Introduction To Non-Rectangular Framing, Cad In Structural Drafting.

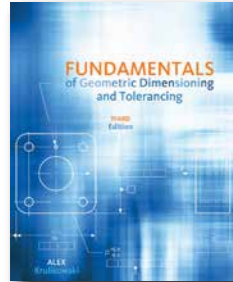
DESIGN & DRAFTING

FUNDAMENTALS OF GEOMETRIC DIMENSIONING AND TOLERANCING, 3E

Alex Krulikowski

© 2013, 480pp, Paperback, 9781111129828

ebook



FUNDAMENTALS OF GEOMETRIC DIMENSIONING AND TOLERANCING 3E is a unique book that meets your needs if you are studying industrial technology, CAD, engineering technology, or manufacturing technology.

This book clearly organizes geometric dimensioning and tolerancing fundamentals into small, logical units for step-by-step understanding. Measurable performance objectives help you assess your progress. Discussion questions promote interaction and higher-order thinking, and practice problems ensure thorough understanding of the concepts presented. FUNDAMENTALS OF GEOMETRIC DIMENSIONING AND TOLERANCING 3E defines and fully encompasses the revised ANSI/ASME Y14.5M-2009 to keep you current on these important industry standards. This book is cited by top industry professionals as meeting the highest “standards” for a GD&T book!

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Section I: INTRODUCTION TO DIMENSIONING AND TOLERANCING. Engineering Drawings. Introduction to Dimensioning and Tolerancing. Coordinate Tolerances and Geometric Tolerances. Dimensioning Symbols. Section II: GEOMETRIC TOLERANCING FUNDAMENTALS. Key Terms used in Geometric Tolerancing. Modifiers and Symbols used in Geometric Tolerancing. The Geometric Tolerancing System Rules. The Geometric Tolerancing System Concepts. Section

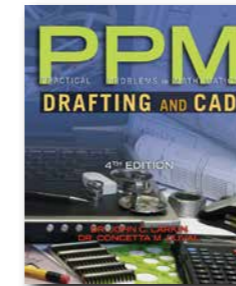
III: FORM TOLERANCES. Flatness. Straightness. Circularity. Cylindricity. Section IV: THE DATUM SYSTEM. Datum System Concepts. Datum Targets. Size Datum Features (RMB). Size Datum Features (MMB). Section V: ORIENTATION TOLERANCES. Perpendicularity. Angularity. Parallelism. Section VI: LOCATION TOLERANCES. Position Introduction. Position Applications. Position Calculations Fixed and Floating Fastener Formulas. Position Applications Advanced. Section VII: RUNOUT AND CONCENTRICITY, AND SYMMETRY TOLERANCES. Circular Runout. Total Runout. Concentricity. Symmetry. Section VIII: PROFILE TOLERANCES. Profile Introduction. Profile of a Surface. Profile of a Line. Section IX: APPENDICES (TBD).

PRACTICAL PROBLEMS IN MATHEMATICS FOR DRAFTING AND CAD, 4E

John Larkin; Concetta Duval

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Designed to enhance your math skills in the field of drafting, this completely updated fourth edition of Practical Problems in Mathematics For Drafting and CAD presents a comprehensive overview of contemporary drafting problems, CAD drawings, and industry applications and practices. This text provides a variety of integrated math problems and CAD operations in order to facilitate critical thinking, problem solving, and basic mathematics literacy. Filled with real-world applications and designed to cover a range of skills and levels of difficulty, the fourth edition includes updated figures, illustrations, problem sets, examples, and solutions in order to give you the skills you need to succeed in the field of drafting.

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1. Whole Numbers. 2. Fractions. 3. Decimals. 4. Decimals, Fractions, and Percents. 5. Geometry Fundamentals. 6. Measurement. 7. Algebra. 8. Applied Trigonometry. 9. Geometric Dimensioning and Tolerancing.

ENGINEERING GRAPHICS

VISUALIZATION, MODELING, AND GRAPHICS FOR ENGINEERING DESIGN, 2E

Dennis K. Lieu, University of California, Berkeley; Sheryl A. Sorby, The Ohio State University

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Created for the next generation of engineering professionals, VISUALIZATION, MODELING, AND GRAPHICS FOR ENGINEERING DESIGN, Second Edition, combines coverage of traditional drafting essentials and the

cutting-edge technology and methods today's professionals need to master for career success. This versatile text provides a strong grounding in fundamentals including core design skills, geometric dimensioning and tolerancing, sketching and drawing, and industry- and discipline-specific applications, even while recognizing how computers have enabled visualizing and modeling techniques that have changed the engineering design process. Working from this modern perspective, the authors explore critical process phases such as creative thinking, product ideation, and advanced analysis, as well as problem solving, collaboration, and communication skills essential for today's engineers and technicians. In addition to numerous updates to reflect the latest technology and trends, the Second Edition of this groundbreaking text features a more streamlined presentation, with a mix of printed and online chapters and a highly modular structure that make it easy to focus on specific topics or interests. New learning resources are available online as well, including a Web-based Mind Tap supplement with interactive quizzes and more than 100 multimedia animations and video clips.

CONTENTS

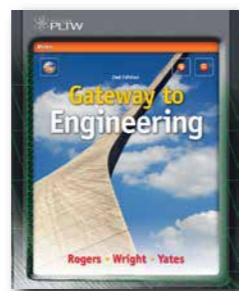
Printed Chapters. Part I: LAYING THE FOUNDATION. 1. An Introduction to Graphical Communication in Engineering. 2. Sketching. 3. Visualization. 4. Creativity and the Design Process. Part II: MODERN DESIGN PRACTICE AND TOOLS. 5. Solid Modeling. 6. Assembly Modeling. 7. Design Analysis. Part III: SETTING UP AN ENGINEERING DRAWING. 8. Orthogonal Projection and Multiview Representation. 9. Pictorials and Perspective Views. 10. Section Views. 11. Auxiliary Views. Part IV: DRAWING ANNOTATION AND DESIGN IMPLEMENTATION. 12. Dimensioning. 13. Tolerancing. 14. Working Drawings. Electronic Chapters. 15. Working in a Team Environment. 16. Fabrication Processes. 17. Advanced Visualization Techniques. 18. Fasteners. 19. Technical and Engineering Animation. 20. Topological Maps and GIS. 21. Information Graphics: Presentation of Data.

GATEWAY TO ENGINEERING, 2E

George E. Rogers, Purdue University; Michael D. Wright, University of Central Missouri; Ben Yates, Missouri University of Science and Technology

© 2014, 480pp, Hardback, 9781133935643

ebook



GATEWAY TO ENGINEERING, 2E helps you build a solid foundation in technological literacy as you study engineering-related careers and educational pathways. With a vibrant four-color design and images to help you visualize concepts, the text

introduces the process of design, the importance of engineering graphics, and applications of electricity and electronics, mechanics, energy, communications, automation/robotics, manufacturing processes, and control systems/computer programming. The Second Edition includes a revised chapter featuring sustainable architecture and enhanced coverage of green technology. It also retains a strong engineering flavor and alignment with national Standards for Technological Literacy, making it the perfect tool for mastering Project Lead the Way's® Gateway to Technology performance objectives.

CONTENTS

UNIT 1: INTRODUCTION TO ENGINEERING. 1. Engineering and Technology. 2. Technological Resources and Systems. UNIT 2: COMMUNICATING ENGINEERING IDEAS. 3. The Engineering Design Process. 4. Sketching. 5. Perspective Drawings. 6. Reverse Engineering. UNIT 3: MODELING ENGINEERING DESIGNS. 7. Parametric Modeling. 8. Prototyping. UNIT 4: THE USE OF ENERGY IN ENGINEERING. 9. Energy. 10. Sustainable Architecture. 11. Transfer of Energy. 12. Fluid Power. 13. Flight and Space. UNIT 5: ELECTRICITY AND ELECTRONICS. 14. Electrical Theory. 15. Electrical Circuits. 16. Electronics. UNIT 6: ROBOTICS AND AUTOMATION. 17. Manufacturing. 18. Robotics. 19. Automation. 20. Emerging Technologies.

ENGINEERING DESIGN, 2E

An Introduction

John R. Karsnitz, Ph.D., The College of New Jersey; Stephen O'Brien, Ph.D., The College of New Jersey; John P. Hutchinson, Ph.D., The College of New Jersey (Emeritus)

© 2013, 576pp, Hardback, 9781111645823

ebook



ENGINEERING DESIGN: AN INTRODUCTION, Second Edition, features an innovative instructional approach emphasizing projects and exploration as learning tools. This engaging text provides an overview of the basic engineering principles that shape our modern world,

covering key concepts within a flexible, two-part format. Part I describes the process of engineering and technology product design, while Part II helps you develop specific skill sets needed to understand and participate in the process. Opportunities to experiment and learn about, with projects ranging from technical drawing to designing electrical systems—and more. With a strong emphasis on project-based learning, the text is an ideal resource for programs using the innovative Project Lead the Way curriculum—and anyone interested in preparing for success in an engineering career.

CONTENTS

PART I: THE ENGINEERING DESIGN PROCESS. Technology: The Human-Designed World. The Process of Design. 3. Development the Design Team. Generating and Developing Ideas. Drawing to Develop Design Ideas. Reverse Engineering. Investigating and Researching for Design Development. Technical Drawing. Testing and Evaluating.. Manufacturing.. PART II: RESOURCES FOR ENGINEERING DESIGN. Designing Structural Systems. Designing Mechanical Systems. Designing Electrical Systems. Designing Pneumatic Systems. Human Factors in Design and Engineering. 16. Math and Science Applications. 17. Design Style. 18. Graphics and Presentation. Glossary. Index.

ENGINEERING AND TECHNOLOGY

Michael Hacker; David Burghardt; Linnea Fletcher; Anthony Gordon

© 2010, 784pp, Hardback, 9781418073893

ebook



Driven by the Standards for Technological Literacy, this National Science Foundation-sponsored book is written by national leaders in engineering and technology education and addresses the most contemporary technological content using engaging,

pedagogically sound “informed design” activities. This unique approach encourages students to develop a thorough understanding of engineering and technology before they ever attempt to develop detailed design solutions. The activities present students with a design problem, and prompt students to begin the solution-finding process with research, inquiry, and analysis. Only after this important step can students begin to discuss specifications and constraints, propose alternatives, and select an optimal design. This process fosters a strong student-teacher discourse and cultivates language proficiency, both with the end result of enhancing student’s overall knowledge. Testing, evaluation, and modifications are addressed next, followed by a communication of achievements in a class presentation and final design report. Woven throughout the text are passages that will acquaint students with the requirements, responsibilities, necessary personal attributes and attitudes, and educational pathways that will lead to success in the various technological areas.

CONTENTS

1. Engineering, Technology, Society, and Culture. 2. Informed Design. 3. Developing Abilities for a Technological World. 4. Materials Processing. 5. Manufacturing. 6. Construction. 7. Energy and Power. 8. Transportation. 9. Electricity and Electronics. 10. Computers and Computer

Architecture. 11. Modern Electronic Communication. 12. Data Networking and Communication. 13. Biotechnology. 14. Chemical Technology. 15. Agricultural Technology. 16. Medical Technology. 17. Technology in the Future.

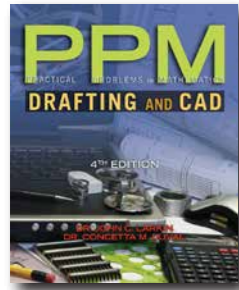
MATHEMATICS

PRACTICAL PROBLEMS IN MATHEMATICS FOR DRAFTING AND CAD, 4E

John Larkin; Concetta Duval

© 2013, 352pp, Paperback, 9781111316808

ebook



Designed to enhance your math skills in the field of drafting, this completely updated fourth edition of Practical Problems in Mathematics For Drafting and CAD presents a comprehensive overview of contemporary drafting problems, CAD drawings,

and industry applications and practices. This text provides a variety of integrated math problems and CAD operations in order to facilitate critical thinking, problem solving, and basic mathematics literacy. Filled with real-world applications and designed to cover a range of skills and levels of difficulty, the fourth edition includes updated figures, illustrations, problem sets, examples, and solutions in order to give you the skills you need to succeed in the field of drafting.

CONTENTS

1. Whole Numbers. 2. Fractions. 3. Decimals. 4. Decimals, Fractions, and Percents. 5. Geometry Fundamentals. 6. Measurement. 7. Algebra. 8. Applied Trigonometry. 9. Geometric Dimensioning and Tolerancing.

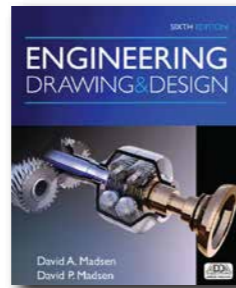
MECHANICAL DRAFTING

ENGINEERING DRAWING AND DESIGN, 6E

David A Madsen; David P. Madsen

© 2017, 1680pp, Hardback, 9781305659728

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For more than 25 years, students have relied on this trusted text for easy-to-read, comprehensive drafting and design instruction that complies with the latest ANSI and ASME industry standards for mechanical drafting. The Sixth Edition of

ENGINEERING DRAWING AND DESIGN continues this tradition of excellence with a multitude of real, high-quality industry drawings and more than 1,000 drafting, design, and practical application problems—including many new to the current edition. The text showcases actual product designs in all phases, from concept through manufacturing, marketing, and distribution. In addition, the engineering design process now features new material related to production practices that eliminate waste in all phases, and the authors describe practices to improve process output quality by using quality management methods to identify the causes of defects, remove them, and minimize manufacturing variables.

CONTENTS

Part I: INTRODUCTION TO ENGINEERING DRAWING AND DESIGN. 1. Introduction to Engineering Drawing and Design. 2. Drafting Equipment, Media, and Reproduction Methods. 3. Computer-Aided Design and Drafting (CADD). 4. Manufacturing Materials and Processes. Part II: FUNDAMENTAL APPLICATIONS. 5. Sketching Applications. 6. Lines and Lettering. 7. Drafting Geometry. Part III: DRAWING VIEWS AND ANNOTATIONS. 8. Multiviews. 9. Auxiliary Views.

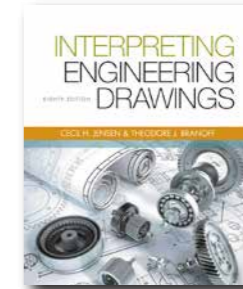
10. Dimensioning and Tolerancing. 11. Fasteners and Springs. 12. Sections, Revolutions, and Conventional Breaks. 13. Geometric Dimensioning and Tolerancing. 14. Pictorial Drawings and Technical Illustrations. Part IV: WORKING DRAWINGS. 15. Working Drawings. 16. Mechanisms: Linkages, Cams, Gears, and Bearings. 17. Belt and Chain Drives. 18. Welding Processes and Representations. Section V: SPECIALTY DRAFTING AND DESIGN. 19. Precision Sheet Metal Drafting. 20. Electrical and Electronics Drafting. 21. Industrial Process Pipe Drafting. 22. Structural Drafting. 23. Heating, Ventilating and Air-Conditioning (HVAC). 24. Civil Drafting. Part VI: ENGINEERING DESIGN. 25. The Engineering Design Process. Appendices. Engineering Drawing and Design Student Companion Website. Descriptive Geometry I. Descriptive Geometry II. Engineering Charts and Graphs. Engineering Drawing and Design Math Applications. Fluid Power.

INTERPRETING ENGINEERING DRAWINGS, 8E

Ted Branoff, North Carolina State University

© 2016, 528pp, Paperback, 9781133693598

ebook



INTERPRETING ENGINEERING DRAWINGS, 8th EDITION offers comprehensive, state-of-the-art training that shows you how to create professional-quality engineering drawings that can be interpreted with precision in today's

technology-based industries. This flexible, user-friendly textbook offers unsurpassed coverage of the theory and practical applications that you'll need as you communicate technical concepts in an international marketplace. All material is developed around the latest ASME drawing standards, helping you keep pace with the dynamic changes in the field of engineering graphics.

CONTENTS

Unit 1: Introduction: Line Types and Sketching. Unit 2: Lettering and Title Blocks. Unit 3: Basic Geometry: Circles and Arcs. Unit 4: Working Drawings and Projection Theory. Unit 5: Introduction to Dimensioning. Unit 6: Inclined Surfaces. Unit 7: Pictorial Sketching. Unit 8: Machining Symbols and Revision Blocks. Unit 9: Chamfers, Undercuts, Tapers and Knurls. Unit 10: Sectional Views. Unit 11: One-and-Two-View Drawings. Unit 12: Surface Texture. Unit 13: Introduction to Conventional Tolerancing. Unit 14: Inch Fits. Unit 15: Metric Fits. Unit 16: Threads and Fasteners. Unit 17: Oblique Surfaces. Unit 18: Auxiliary Views. Unit 19: Sheet Metal Drawings. Unit 20: Selection and Arrangement of Views. Unit 21: Piping Drawings. Unit 22: Bearings. Unit 23: Manufacturing Materials. Unit 24: Casting Processes. Unit 25: Violating True Projection: Conventional Practices. Unit 26: Pin Fasteners. Unit 27: Drawings for Numerical Control. Unit 28: Assembly Drawings. Unit 29: Structural

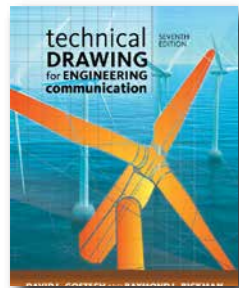
Steel. Unit 30: Welding Drawings. Unit 31: Groove Welds. Unit 32: Other Basic Welds. Unit 33: Spur Gears. Unit 34: Bevel Gears and Gear Trains. Unit 35: CAMs. Unit 36: Bearings and Clutches. Unit 37: Ratchet Wheels. Unit 38: Introduction to Geometric Dimensioning and Tolerancing. Units 38 through approximately 48 will cover GD&T.

TECHNICAL DRAWING FOR ENGINEERING COMMUNICATION, 7E

David E. Goetsch, Northwest Florida State College; Raymond L. Rickman, Northwest Florida State College; William S. Chalk

© 2016, 1008pp, Hardback, 9781285173016

ebook



TECHNICAL DRAWING FOR ENGINEERING COMMUNICATION, 7E offers a fresh, modern approach to technical drawing that combines the most current industry standards with up-to-date technologies and software, resulting in a valuable,

highly relevant resource you won't want to be without. The book builds on features that made its previous editions so successful: comprehensive coverage of the "total technical drawing experience" that explores both the basic and advanced aspects of engineering and industrial technology and reviews both computer modeling and more traditional methods of technical drawing. Enhancements for the seventh edition include updates based on industry trends and regulations, an all-new chapter on employability skills, and additional content on SolidWorks 3D modeling software for drafting technicians. The end result is a tool that will give you the real-world skills needed for a successful career in CAD, drafting, or design.

CONTENTS

Preface. Part I: BASICS. Introduction. 1. Employability

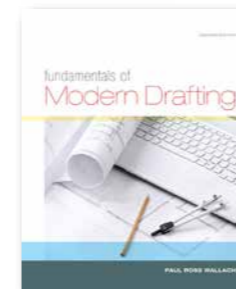
Skills for Drafting and Design Technician. 2. Drafting Tools: Conventional, CAD, and Solid Modeling. 3. Sketching and Lettering for Engineering Communication. 4. Geometric Construction. Part II: TECHNICAL DRAWING FUNDAMENTALS. 5. Spatial Visualization and Multiview Drawings. 6. Dimensioning and Notation. 7. Sectional Views. 8. Auxiliary Views. 9. Descriptive Geometry. 10. Patterns and Developments. 11. Solid/3D Modeling: Computational Design and Analysis. Part III: DESIGN DRAFTING APPLICATIONS. 12. Geometric Dimensioning and Tolerancing. 13. Fasteners. 14. Springs. 15. Cams. 16. Gears. 17. Assembly and Detail Drawings for Design. 18. Pictorial Drawings. Part IV: RELATED TECHNOLOGIES, APPLICATIONS AND PROCESSES. 19. Welding. 20. Modern Manufacturing: Materials, Processes, and Automation. 21. The Design and Advanced Concepts. Appendix A: Tables. Glossary. Index.

FUNDAMENTALS OF MODERN DRAFTING, 2E

Paul Ross Wallach, Cañada College

© 2015, 544pp, Hardback, 9781133603627

ebook



FUNDAMENTALS OF MODERN DRAFTING, Second Edition, provides a thorough introduction to contemporary drafting, covering essential technical and engineering drawing concepts and key professional applications. The author uses a highly

practical, building-block approach to help you quickly develop the knowledge and skills you need to prepare working drawings for production. Coverage encompasses freehand sketching, instrument drawing, CAD, drafting conventions and formats, multiview, development, pictorial drawing procedures, geometric tolerancing practices, descriptive geometry, and more. Every chapter includes vibrant illustrations to complement the text, as well as hands-on exercises that encourage you to apply what you're learning. Now updated to reflect the latest trends and technology, the new Second Edition reflects current ASME standards to help you make a smooth transition from classroom study to professional success.

CONTENTS

Preface. 1. Introduction to Contemporary Drafting. 2. Drafting Equipment and Supplies. 3. Sketching and Lettering. 4. Introduction to Computer-Aided Drafting Systems. 5. Drafting Room Design Teams. 6. Drafting Conventions and Formats. 7. Geometric Construction. 8. Multiview Drawings. 9. Dimensioning Conventions and Surface Finishes. 10. Tolerancing and Geometric Tolerancing. 11. Sectional Views. 12. Auxiliary Views and Revolutions. 13. Descriptive Geometry. 14. Development Drawings. 15. Pictorial Drawings. 16. Fasteners. 17. Green Design in Industry. 18. Working Drawings. 19. Welding Drawings. 20. Gears and Cams. 21. Piping

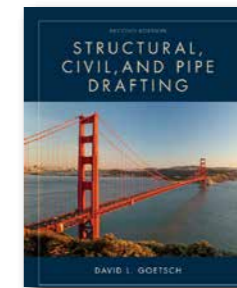
Drawings. 22. Electronics Drafting. 23. Tool Design Drafting. 24. Architectural Drafting. Appendix A: Tables. Appendix B: Abbreviations. Glossary. Index.

STRUCTURAL, CIVIL AND PIPE DRAFTING, 2E

David L. Goetsch, Okaloosa-Walton Community College, Niceville, Florida

© 2014, 464pp, Paperback, 9781133949398

ebook



Rapidly changing infrastructure along with new products and manufacturing processes are making expertise in architectural, civil, pipe, and structural design increasingly essential for modern drafting professionals. Building on

decades of success with his acclaimed STRUCTURAL DRAFTING text, author David Goetsch created STRUCTURAL, CIVIL, AND PIPE DRAFTING to help you develop the specific knowledge and skills needed to succeed in a rapidly evolving, high-demand field. The text opens with an overview of structural drafting—from department organization to product fabrication and shipping—before exploring critical topics such as structural steel, pre-cast concrete, poured-in-place concrete, structural wood drafting, pre-fab metal buildings, civil engineering drafting, and process piping. Now thoroughly updated, the Second Edition features new and revised material reflecting the latest trends, technology, and applications, as well as more photographs and illustrations and improved CAD application exercises to enhance learning.

CONTENTS

1. OVERVIEW OF STRUCTURAL DRAFTING. Introduction to Structural Drafting. Typical Structural Drafting Department. Drawing, Checking, Correcting,

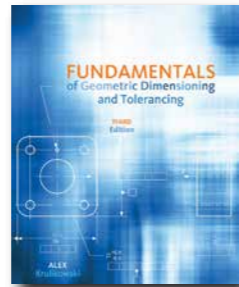
and Revising Processes. Product Fabrication and Shipping. Structural Connectors. 2. STRUCTURAL STEEL DRAFTING. Structural Steel Framing Plans. Structural Steel Sections. Structural Steel Connection Details. Structural Steel Fabrication Details. Structural Steel Bills of Materials. Pre-Engineered Metal Building. 3. STRUCTURAL PRECAST CONCRETE DRAFTING. Precast Concrete Framing Plans. Precast Concrete Sections. Precast Concrete Connection Details. Precast Concrete Fabrication Details. Precast Concrete Bills of Materials. 4. STRUCTURAL POURED-IN-PLACE CONCRETE. Poured-in-Place Concrete Foundations. Poured-in-Place Concrete Walls and Columns. Poured-in-Place Concrete Floor Systems. Poured-in-Place Stairs and Ramps. 5. STRUCTURAL WOOD DRAFTING. Structural Wood Floor Systems. Structural Wood Walls. Structural Wood Roofs. Structural Wood Posts, Beams, Girders, and Arches. 6. CIVIL ENGINEERING DRAFTING AND PIPING. Property Maps and Plot Plans. Contour Lines, Profiles, and Roadwork. Quality Takeoffs and Calculations. Pipe Drafting. 7. EMPLOYMENT IN DRAFTING. Finding a Job and Succeeding in Drafting. Advanced Drafting Projects.

FUNDAMENTALS OF GEOMETRIC DIMENSIONING AND TOLERANCING, 3E

Alex Krulikowski

© 2013, 480pp, Paperback, 9781111129828

ebook



FUNDAMENTALS OF GEOMETRIC DIMENSIONING AND TOLERANCING 3E is a unique book that meets your needs if you are studying industrial technology, CAD, engineering technology, or manufacturing technology.

This book clearly organizes geometric dimensioning and tolerancing fundamentals into small, logical units for step-by-step understanding. Measurable performance objectives help you assess your progress. Discussion questions promote interaction and higher-order thinking, and practice problems ensure thorough understanding of the concepts presented. FUNDAMENTALS OF GEOMETRIC DIMENSIONING AND TOLERANCING 3E defines and fully encompasses the revised ANSI/ASME Y14.5M-2009 to keep you current on these important industry standards. This book is cited by top industry professionals as meeting the highest “standards” for a GD&T book!

CONTENTS

Section I: INTRODUCTION TO DIMENSIONING AND TOLERANCING. Engineering Drawings. Introduction to Dimensioning and Tolerancing. Coordinate Tolerances and Geometric Tolerances. Dimensioning Symbols. Section II: GEOMETRIC TOLERANCING FUNDAMENTALS. Key Terms used in Geometric Tolerancing. Modifiers and Symbols used in Geometric Tolerancing. The Geometric Tolerancing System Rules. The Geometric Tolerancing System Concepts. Section III: FORM TOLERANCES. Flatness. Straightness. Circularity. Cylindricity. Section IV: THE DATUM

SYSTEM. Datum System Concepts. Datum Targets. Size Datum Features (RMB). Size Datum Features (MMB). Section V: ORIENTATION TOLERANCES. Perpendicularity. Angularity. Parallelism. Section VI: LOCATION TOLERANCES. Position Introduction. Position Applications. Position Calculations Fixed and Floating Fastener Formulas. Position Applications Advanced. Section VII: RUNOUT AND CONCENTRICITY, AND SYMMETRY TOLERANCES. Circular Runout. Total Runout. Concentricity. Symmetry. Section VIII: PROFILE TOLERANCES. Profile Introduction. Profile of a Surface. Profile of a Line. Section IX: APPENDICES (TBD).

NATIONAL GEOGRAPHIC READER: ARCHITECTURE & CONSTRUCTION (WITH VPG EBOOK PRINTED ACCESS CARD)

National Geographic Learning

© 2013, 115pp, Paperback, 9781133960232

ebook



Bring your learning to life with compelling images, media and text from National Geographic. ARCHITECTURE AND CONSTRUCTION W/PAC eBook will help you develop a clearer understanding of the world around you through

engaging content. This reader is designed to be used in combination with several core texts in Architecture, Engineering and Construction. Used as a supplement with two strong brands of National Geographic and Delmar Learning, this reader bring relevancy, critical thinking skill activities, vocabulary and career information to topics covered in architecture and construction. With broad articles included in the reader, the companion website will allow you to apply topics as they show how the theories are applied in a real world setting.

CONTENTS

The Big Idea: Safe Houses. Technology: Town on the Move. How to Help: Don't Fan the Flames. My Seven: What We Learn from Deadly Quakes Physical Change. Tunnel Vision. Up On the Roof. The New Great Walls. Saving Energy: It Starts at home. Next: Simulating Wildfires. Technology: Full Tilt. Kazakhstan's Tomorrowland. Village Green Biomimetics.

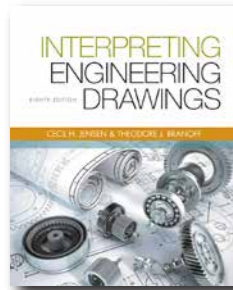
PRINT READING

INTERPRETING ENGINEERING DRAWINGS, 8E

Ted Branoff, North Carolina State University

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ebook



INTERPRETING ENGINEERING DRAWINGS, 8th EDITION offers comprehensive, state-of-the-art training that shows you how to create professional-quality engineering drawings that can be interpreted with precision in today's

technology-based industries. This flexible, user-friendly textbook offers unsurpassed coverage of the theory and practical applications that you'll need as you communicate technical concepts in an international marketplace. All material is developed around the latest ASME drawing standards, helping you keep pace with the dynamic changes in the field of engineering graphics.

CONTENTS

Unit 1: Introduction: Line Types and Sketching. Unit 2: Lettering and Title Blocks. Unit 3: Basic Geometry: Circles and Arcs. Unit 4: Working Drawings and Projection Theory. Unit 5: Introduction to Dimensioning. Unit 6: Inclined Surfaces. Unit 7: Pictorial Sketching. Unit 8: Machining Symbols and Revision Blocks. Unit 9: Chamfers, Undercuts, Tapers and Knurls. Unit 10: Sectional Views. Unit 11: One-and-Two-View Drawings. Unit 12: Surface Texture. Unit 13: Introduction to Conventional Tolerancing. Unit 14: Inch Fits. Unit 15: Metric Fits. Unit 16: Threads and Fasteners. Unit 17: Oblique Surfaces. Unit 18: Auxiliary Views. Unit 19: Sheet Metal Drawings. Unit 20: Selection and Arrangement of Views. Unit 21: Piping Drawings. Unit 22: Bearings. Unit 23: Manufacturing Materials. Unit 24: Casting Processes. Unit 25: Violating True

Projection: Conventional Practices. Unit 26: Pin Fasteners. Unit 27: Drawings for Numerical Control. Unit 28: Assembly Drawings. Unit 29: Structural Steel. Unit 30: Welding Drawings. Unit 31: Groove Welds. Unit 32: Other Basic Welds. Unit 33: Spur Gears. Unit 34: Bevel Gears and Gear Trains. Unit 35: CAMs. Unit 36: Bearings and Clutches. Unit 37: Ratchet Wheels. Unit 38: Introduction to Geometric Dimensioning and Tolerancing. Units 38 through approximately 48 will cover GD&T.

PRINT READING FOR ENGINEERING AND MANUFACTURING TECHNOLOGY WITH PREMIUM WEB SITE PRINTED ACCESS CARD, 3E

David A Madsen

© 2013, 448pp, Paperback, 9781111308711

ebook



PRINT READING FOR ENGINEERING AND MANUFACTURING TECHNOLOGY 3E takes a practical approach to print reading, with fundamental through advanced coverage that demonstrates industry standards essential for pursuing careers in the 21st

century. You will learn step-by-step how to interpret actual industry prints while building the knowledge and skills that will allow you to read complete sets of working drawings. Realistic examples, illustrations, related tests, and print reading problems are based on real world engineering prints that comply with ANSI, ASME, AWS, and other related standards. Included in this new edition is material on electronic filing, discovery, the duty to prevent spoliation, pertinent rule changes and coverage of the HIPAA standards that facilitates your understanding of the importance of these relatively new areas of practice. Thorough updating of the law, changes in rules of procedure, evidence, and ethics standards keeps you current on changes in the law and practice.

CONTENTS

1. Introduction to Engineering and Manufacturing Technology Print Reading. 2. Communicating with a Sketch. 3. Scales and Precision Measurement. 4. Reading Lines and Lettering on a Print. 5. Reading Multiviews. 6. Reading Auxiliary Views. 7. Manufacturing Materials and Processes. 8. Reading Dimensions. 9. Reading Drawings with Fasteners and Springs. 10. Reading Sections, Revolutions and Conventional Breaks. 11. Reading Geometric Dimensioning and Tolerancing. 12. Reading Linkage, Cam, Gear, and Bearing Prints. 13. Reading Precision Sheet Metal Drawings. 14. Reading Working Drawings. 15. Welding Processes and Reading Welding Representations. 16. Reading Pictorial Drawings. 17. Reading Electrical Diagrams and Schematics. Glossary. Index.

BASIC BLUEPRINT READING AND SKETCHING, 9E

Thomas P. Olivo; C. Thomas Olivo

© 2010, 320pp, Paperback, 9781435483781

ebook



For over 50 years, Basic Blueprint Reading and Sketching has been an international best-seller, with close to \$500,000 in sales and THE definitive resource for blueprint reading. The newly revised 9th edition of Basic Blueprint Reading and Sketching

continues the traditions in helping to readers achieve competence in reading and sketching technical drawings. This classic interactive book/workbook will help users develop skills in reading and interpreting industrial drawings and preparing basic to advanced technical sketches. This book will provide them with basic principles, concepts, ANSI and SI Metric drafting symbols and standards, terminology, manufacturing process notes, and other related technical information contained on a mechanical or CAD drawing. Each unit features a basic principle and at least one blueprint and assignment that encourages students to practice newly learned skills. This edition contains coverage of the latest ANSI, ISO, AWS and ASME standards.

CONTENTS

Section 1 Lines. 1. Bases for Blueprint Reading and Sketching. 2. The Alphabet of Lines and Object Lines. 3. Hidden Lines and Center Lines. 4. Extension Lines and Dimension Lines. 5. Projection Lines and Line Combinations. Section 2 Views. 6. Three-View Drawings. 7. Arrangement of Views. 8. Two-View Drawings. 9. One-View Drawings. 10. Auxiliary Views. Section 3 Dimensions and Notes. 11. Size and Location Dimensions. 12. Dimensioning Cylinders, Circles, and Arcs. 13. Size Dimensions for Holes and Angles. 14. Location Dimensions for Points, Centers, and Holes. 15. Dimensioning Large Arcs and Base Line Dimensions. 16.

Tolerances: Fractional and Angular Dimensions. 17. Unilateral, Lateral, Decimal, Tolerances and Limits. 18. Interchangeable Parts, Allowances and Classes of Fit. 19. Representing and Dimensioning External Screw Threads. 20. Representing and Specifying Internal and Left-Hand Threads. 21. Dimensioning Tapers and Machined Surfaces. 22. Dimensioning with Shop Notes. Section 4 The SI Metric System. 23. Metric System Dimensioning and ISO Symbols. 24. First-Angle Projection and Dimensioning. 25. Metric Screw Threads, Dual Dimensioning, and Tolerancing. Section 5 Sections. 26. Cutting Planes, Full Sections, and Section Lining. 27. Half Sections, Partial Sections, and Full-Section Assembly Drawings. Section 6 Computer Numerical Control (CNC) Fundamentals. 28. Datums: Ordinate and Tabular Dimensioning. Section 7 Geometric Dimensioning and Tolerancing. 29. Geometric Dimensioning, Tolerancing, and Datum Referencing. Section 8 Computer Graphics Technology. 30. CADD/CAM/CIM and Robotics. Section 9 Specialty Drawings. 31. Welding Symbols, Representation, and Dimensioning. 32. Surface Developments and Precision Sheet Metal Drawings. Section 10 Working Drawings. 33. Detail Drawings and Assembly Drawings. Section 11 Sketching Lines and Basic Forms. 34. Sketching Horizontal, Vertical, and Slant Lines. 35. Sketching Curved Lines and Circles. 36. Sketching Irregular Shapes. 37. Sketching Fillets, Radii, and Rounded Corners and Edges. Section 12 Freehand Lettering. 38. Freehand Vertical Lettering. 39. Freehand Inclined Lettering. Section 13 Shop Sketching: Pictorial Drawings. 40. Orthographic Sketching. 41. Oblique Sketching. 42. Isometric Sketching. 43. Perspective Sketching. 44. Pictorial Drawings and Dimensions. Section 14 Sketching for CAD/CNC. 45. Two-Dimensional and Three-Dimensional CAD Sketching. 46. Proportions and Assembly Drawings. Glossary of Select Terms. INDEX.

CAREER SUCCESS

WORKPLACE/PROFESSIONAL

THE BUSINESS ANALYST'S HANDBOOK

Howard Podeswa

© 2009, 432pp, Paperback, 9781598635652

ebook



The Business Analyst (BA) plays an important role as liaison between business stakeholders and the technical team (software developers, vendors, etc.), ensuring that business needs are reflected in any software solution. Despite the importance of the job,

there is currently no book specifically designed as a comprehensive reference manual for the working BA. The Business Analyst's Handbook solves this problem by providing a useful compendium of tools, tables, lists, and templates that BAs can use on-the-job to carry out their tasks. For example, you might be preparing for an interview session and use the book's checklist of interviewees to verify whether there is appropriate coverage of business stakeholders. Or you might be asked to review some diagrams and refer to the Glossaries of Symbols (organized by diagram type) for guidance. Or you may be asked to prepare textual requirements documentation and refer to the Business Requirement template for a list of artifacts and table of contents. Whatever your BA needs, the Business Analyst's Handbook places the necessary information right at your fingertips.

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Introduction; Chapter 1: Overview of BA Activities Throughout the Life Cycle; Chapter 2: Meeting Guide; Chapter 3: Standards and Guidelines Used in This Book; Chapter 4: BA Toolkit; Chapter 5: Tips and Checklists; Chapter 6: Templates; Appendix

A: Glossary of BA Terms; Appendix B: Acronyms; Appendix C: Further Reading

CONSTRUCTION

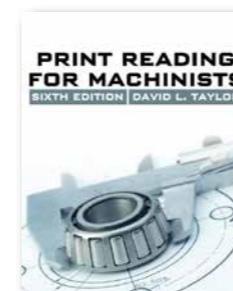
BLUEPRINT READING & SKETCHING

PRINT READING FOR MACHINISTS, 6E

David L. Taylor

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CENGAGE | MINDTAP ebook



Master the basics of print interpretation! PRINT READING FOR MACHINISTS, Sixth Edition, is an ideal resource for machine trades students and apprentices alike who want to gain the knowledge and skills needed for career success. Now updated to

the latest ANSI standards, this thorough text includes 31 instructional units providing all-inclusive coverage that progresses from fundamental concepts to more advanced topics, including the alphabet of lines, orthographic projection, arrangement of views, application of dimensions and tolerances, machining processes, and more. With review questions to help reinforce learning and drawing exercises for hands-on sketching practice, this trusted text is equally valuable for classroom use or self-paced learning.

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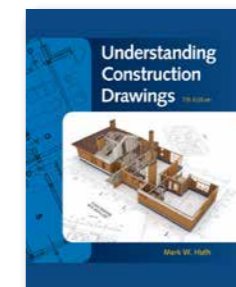
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UNDERSTANDING CONSTRUCTION DRAWINGS, 7E

Mark W. Huth

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This proven, uniquely practical text provides your students with a thorough guide to reading, understanding, and working with construction drawings. Now updated to reflect the 2015 International Building Code® and 2015 International Residential

Code®, the Seventh Edition includes accurate, up-to-date information on current materials, practices, and standards to prepare students for career success in modern building trades. The text is designed from start to finish for real-world relevance, with topics organized by actual construction processes, realistic construction drawings integrated into chapter content, hundreds of practical questions and activities, and full-size residential and commercial construction prints. The author covers fundamental concepts including views, lines, basic dimensioning, and symbols, as well as more advanced principles and practices such as orienting

and cross-referencing drawings, interpreting complex drawings, and working with commercial construction elements like structural steel, masonry, and reinforced concrete. In addition to updates related to 2015 codes, the text features an all-new unit covering multi-building developments, fire code and sound control measures, and seismic considerations, with new drawings for a four-story, two-family building in an urban, seismic-sensitive area.

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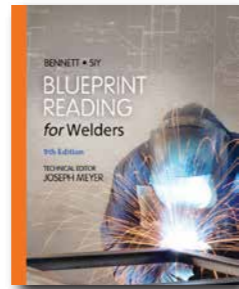
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BLUEPRINT READING FOR WELDERS, SPIRAL BOUND VERSION, 9E

A.E. Bennett; Louis J. Sij

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ebook



This hands-on, reader-friendly guide provides comprehensive, up-to-date coverage of welding symbols and their application to welding prints and practices. BLUEPRINT READING FOR WELDERS, Ninth Edition, uses step-by-step instructions and

detailed illustrations to help you gain the knowledge and skills you need to interpret a wide range of working documents, from simple sketches to the most complex blueprints. The text covers auxiliary views, detail views, projections, sections, and detail and assembly drawings. Now updated and expanded, the new Ninth Edition features the latest AWS symbols and terms along with the ISO welding symbols, current specifications and dimensioning practices, relevant industry developments, and cutting-edge information to support your professional success in this dynamic field.

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BLUEPRINTS AND PLANS FOR HVAC, 4E

Joseph Moravek, Nance Universal HVACR Technical School, Beaumont, Texas; Curtis McGuirt, Nance International, Beaumont, Texas; Wilma B. Miller, Worcester Polytechnic Institute

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BASIC BLUEPRINT READING AND SKETCHING, 9E

Thomas P. Olivo; C. Thomas Olivo

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For over 50 years, Basic Blueprint Reading and Sketching has been an international best-seller, with close to \$500,000 in sales and THE definitive resource for blueprint reading. The newly revised 9th edition of Basic Blueprint Reading and Sketching

continues the traditions in helping to readers achieve competence in reading and sketching technical drawings. This classic interactive book/workbook will help users develop skills in reading and interpreting industrial drawings and preparing basic to advanced technical sketches. This book will provide them with basic principles, concepts, ANSI and SI Metric drafting symbols and standards, terminology, manufacturing process notes, and other related technical information contained on a mechanical or CAD drawing. Each unit features a basic principle and at least one blueprint and assignment that encourages students to practice newly learned skills. This edition contains coverage of the latest ANSI, ISO, AWS and ASME standards.

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BUILDING CODES

CODE SOURCE ACCESSIBILITY Codes, Standards, and Guidelines

International Code Council (ICC); Dominic Marinelli

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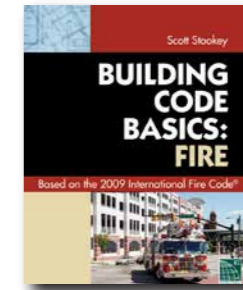
With a single resource, you can learn to translate key state and federal accessibility requirements into clear, easy-to-understand and easy-to-apply explanations. It's all contained in CODE SOURCE ACCESSIBILITY: CODES, STANDARDS, AND GUIDELINES, the

groundbreaking resource that explores the accessibility requirements that apply to commercial, residential, and existing buildings. The book focuses on four major industry publications: the International Building Code® (IBC®) and its accessibility reference standard A117.1 – 2003, the Revised Americans with Disabilities Act/ Architectural Barriers Act Accessibility Guidelines (ADAAG 2004), and the Federal Fair Housing Act's Accessibility Guidelines (FH Act). Working in agreement with one another, the standards set forth by these documents serve as the guiding principles for the construction of code-compliant buildings, and CODE SOURCE ACCESSIBILITY: CODES, STANDARDS, AND GUIDELINES is the perfect collection of their most critical provisions. Not intended to replace the full state and federal accessibility requirements, this concise yet thorough resource will help students to learn and quickly reference basic code-compliant accessibility standards for people with disabilities. It will also help readers to avoid the future pitfalls of not adhering to the standards, such as costly litigation and retrofitting, making it a tool they won't want to be without. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

CODE BASICS SERIES: 2009 INTERNATIONAL FIRE CODE

International Code Council (ICC)

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Comprehensive coverage and strong, clear connections between building- and fire-related concepts and the International Fire Code® requirements that govern them form the cornerstone of this valuable resource. The CODE BASIC BOOK

FOR THE 2009 INTERNATIONAL FIRE CODE® is designed to explore the proper application and use of the 2009 International Fire Code®, by offering detailed guidance of the basic provisions found in the Code®. It begins with a section of prerequisite reading, explaining occupancy classifications, what they are, and how they should be applied. This is critical in establishing a foundational knowledge that readers can build upon as they progress through subsequent content. The book is then divided into six logically organized sections, and covers important topics as they pertain to the Code®, including firefighter's response to buildings, fire department access to roadways, firefighter protection systems, sprinkler systems, hazards in buildings and communities, compressed gasses, combustible liquids, basic requirements for storage & use for hazardous materials, and much more. Straightforward and easy-to-read, it is an indispensable tool for fire inspectors, code officials, fire marshals, design professionals, firefighters, and anyone studying to enter these fields. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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CARPENTRY

CARPENTRY, INTERNATIONAL EDITION, 6E

Floyd Vogt, State University of New York, Delhi

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Refine the skills needed to become an accomplished professional carpenter with the in-depth coverage and practical applications found in **CARPENTRY, International Edition**. This bestseller by well-known expert Floyd Vogt presents the intricate system of contemporary light frame building construction using reader-friendly, step-by-step procedures. **CARPENTRY, 6E** follows the logical path of a residential project, using thorough explanations, easy-to-follow diagrams and dynamic onsite visuals to explore building plans, sitework and layout, footings and foundations, framing, interior and exterior surfaces, cabinetry, and more. This edition blends all of the essential information for traditional construction with today's latest practices, including contemporary safety tools and techniques, use of alternative construction, such as concrete forms, and "green" building techniques. This edition also introduces more commercial drawings and construction. From initial building layouts through finishing with trim carpentry, each section features step-by-step procedures for key carpentry jobs with tips of the trade and insight into today's industry. Photo-realistic drawings showcase concepts and procedures with detailed, easy to understand information. The new online CourseMate provides interactive learning tools to further ensure you gain the skills and understanding necessary for long-term professional success as a carpenter.

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RESIDENTIAL CONSTRUCTION ACADEMY, 3E

Facilities Maintenance: Maintaining, Repairing, and Remodeling

Kevin Standiford, Arkansas Teacher Retirement System, Little Rock, AR, Lead Program Analyst

© 2014, 592pp, Paperback, 9781133282433

ebook



Created in partnership with the Home Builders Institute (HBI), the workforce development arm of the National Association of Home Builders (NAHB), the Residential Construction Academy Series is the only program based on the National Skill Standards for

residential construction. Step-by-step illustrations and an easy-to-read writing style make RESIDENTIAL CONSTRUCTION ACADEMY: FACILITIES MAINTENANCE, 3E the powerful tool you need for any facilities maintenance course. This edition walks you through a straightforward approach that describes common maintenance tasks in detail, like carpentry, wiring, groundskeeping, appliance repair, painting, plumbing, and HVAC. Enhanced chapters on basic math and blueprint reading give you the most comprehensive training available. See the last three chapters for your energy efficiency concerns, two chapters on Weatherization and one on Solar. Plus, each section emphasizes safety and highlights the skills you can build that employers are searching for. RESIDENTIAL CONSTRUCTION ACADEMY: FACILITIES MAINTENANCE, 3RD is the manual you need to develop a solid foundation in facilities maintenance.

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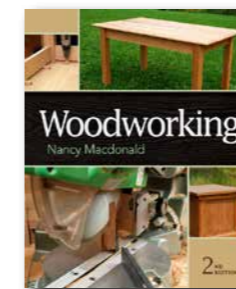
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WOODWORKING, 2E

Nancy MacDonald, State University of New York at Delhi

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CENGAGE | MINDTAP ebook



A comprehensive guide for aspiring carpenters, cabinetmakers, or woodworking hobbyists, WOODWORKING, 2nd Edition introduces the basics of woodworking tools and materials while also exploring the art of creating finished pieces and

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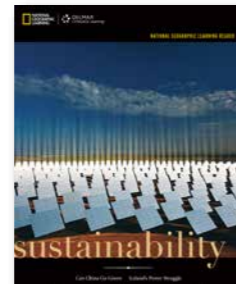
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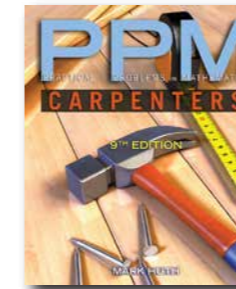
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PRACTICAL PROBLEMS IN MATHEMATICS FOR CARPENTERS, 9E

Mark Huth

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Take command of any building and carpentry project with the robust, construction-specific math skills you will get from the 9th Edition of PRACTICAL PROBLEMS IN MATHEMATICS FOR CARPENTERS. Divided into short units, this

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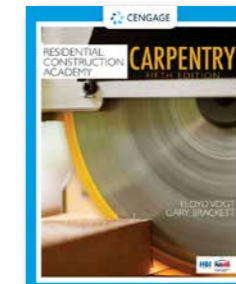
RESIDENTIAL CONSTRUCTION ACADEMY, 5E

Carpentry

Floyd Vogt, State University of New York, Delhi; Gary Brackett, State University of New York, Delhi

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CENGAGE | MINDTAP ebook



Created through a partnership between Home Builders Institute (HBI) and the National Association of Home Builders (NAHB), this best-selling resource uses a visual, practical, instructional approach to teach you how to build a home and help you develop

essential skills. RESIDENTIAL CONSTRUCTION ACADEMY: CARPENTRY, Fifth Edition, provides a logical, sequential introduction to essential construction topics. Each chapter begins with learning objectives and a glossary, features relevant pictures and diagrams to reinforce key ideas, and concludes with construction procedures and review questions. Throughout the text, the authors also highlight important techniques, tools, materials, code requirements, and best practices you'll need to know as you begin your career in residential building construction.

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Part I: TOOLS AND MATERIALS. 1. Hand Tools. 2. Hand Power Tools. 3. Stationary Power Tools. 4. Wood and Wood Products. 5. Fasteners. Part II: ROUGH CARPENTRY. 6. Jobsite Safety and Construction Aids. 7. Building Plans and Codes. 8. Building Layout. 9. Concrete Form Construction. 10. Floor Framing. 11. Wall and Ceiling Framing. 12. Roof Framing. Part III: EXTERIOR FINISH. 13. Roofing. 14. Windows and Doors. 15. Siding and Decks. Part IV: INTERIOR FINISH. 16. Insulation and Ventilation. 17. Wall Finish. 18. Interior Finish. 19. Stair Framing and Finish. 20. Cabinets and Countertops.

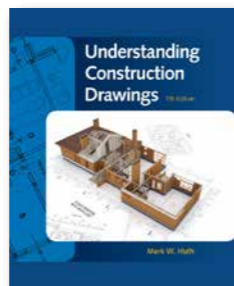
CONSTRUCTION MANAGEMENT

UNDERSTANDING CONSTRUCTION DRAWINGS, 7E

Mark W. Huth

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This proven, uniquely practical text provides your students with a thorough guide to reading, understanding, and working with construction drawings. Now updated to reflect the 2015 International Building Code® and 2015 International Residential

Code®, the Seventh Edition includes accurate, up-to-date information on current materials, practices, and standards to prepare students for career success in modern building trades. The text is designed from start to finish for real-world relevance, with topics organized by actual construction processes, realistic construction drawings integrated into chapter content, hundreds of practical questions and activities, and full-size residential and commercial construction prints. The author covers fundamental concepts including views, lines, basic dimensioning, and symbols, as well as more advanced principles and practices such as orienting and cross-referencing drawings, interpreting complex drawings, and working with commercial construction elements like structural steel, masonry, and reinforced concrete. In addition to updates related to 2015 codes, the text features an all-new unit covering multi-building developments, fire code and sound control measures, and seismic considerations, with new drawings for a four-story, two-family building in an urban, seismic-sensitive area.

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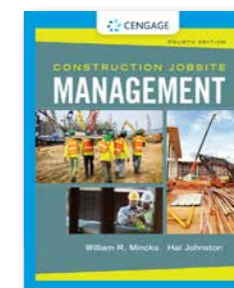
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CONSTRUCTION JOBSITE MANAGEMENT, 4E

William R. Mincks, Washington State University (retired); Hal Johnston

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The newly updated Fourth Edition of CONSTRUCTION JOBSITE MANAGEMENT examines all facets of construction project management from the contractor's point of view.

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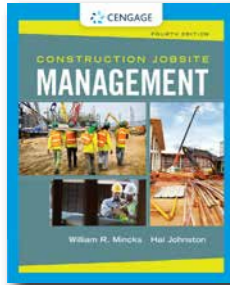
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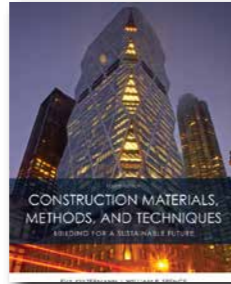
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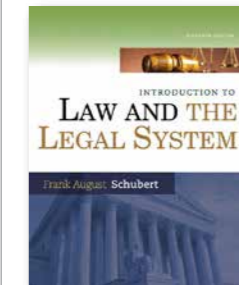
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John E. Gribbin, Essex County College

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RESIDENTIAL CONSTRUCTION ACADEMY, 3E

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Kevin Standiford, Arkansas Teacher Retirement System, Little Rock, AR, Lead Program Analyst

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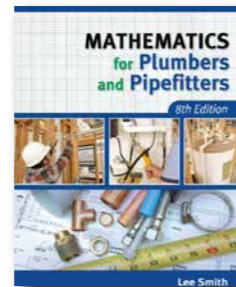
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Lee Smith

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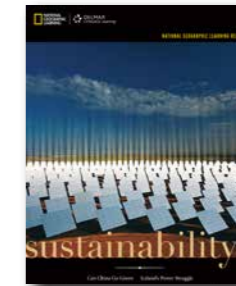
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CODE SOURCE ACCESSIBILITY

Codes, Standards, and Guidelines

International Code Council (ICC); Dominic Marinelli

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Barbara Jackson

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John Hohman

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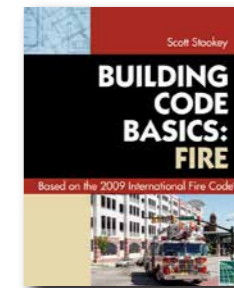
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Chapter 2: TAB (Testing and Balancing)
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FOR THE 2009 INTERNATIONAL FIRE CODE® is designed to explore the proper application and use of the 2009 International Fire Code®, by offering detailed guidance of the basic provisions found in the Code®. It begins with a section of prerequisite reading, explaining occupancy classifications, what they are, and how they should be applied. This is critical in establishing a foundational knowledge that readers can build upon as they progress through subsequent content. The book is then divided into six logically organized sections, and covers important topics as they pertain to the Code®, including firefighter's response to buildings, fire department access to roadways, firefighter protection systems, sprinkler systems, hazards in buildings and communities, compressed gasses, combustible liquids, basic requirements for storage & use for hazardous materials, and much more. Straightforward and easy-to-read, it is an indispensable tool for fire inspectors, code officials, fire marshals, design professionals, firefighters, and anyone studying to enter these fields. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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HVACR 201

John E. Hohman, University of North Texas; Joseph Moravek, Nance Universal HVACR Technical School, Beaumont, Texas

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ebook



The second installment in a series of useful and resourceful guides, HVACR 201, continues to build upon the basics of the HVACR trade. The result of a joint effort by industry leading Air Conditioning Contractors of America (ACCA), PHCC Educational Foundation

Plumbing Apprentice & Journeyman Training Committee (PHCC Educational Foundation), and the Refrigeration Service Engineers Society (RSES), the book begins with simpler HVACR concepts and progresses into increasingly complex theories and skills. Starting with coverage of all of the important components of a system, the book advances to deal with topics in electrical, heating, motors, and cooling- then moving to troubleshooting and installation procedures. Theoretical knowledge is presented alongside practical, industry-relevant examples, allowing both entry-level technicians and 2nd year apprentices to easily learn and apply key HVACR concepts. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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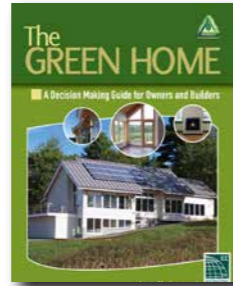
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THE GREEN HOME

A Decision Making Guide for Owners and Builders
Lynn Underwood

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ebook



What does a “green” home look like? What are its characteristics, and how can you ensure that you meet the highest green standards within a given budget? The answers to these questions and more are found in *The Green Home*, a book dedicated to teaching builders and homeowners alike about

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HVACR 101

Joseph Moravek, Nance Universal HVACR Technical School,
Beaumont, Texas

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ebook



Designed to guide apprentices, entry-level technicians, and first-year students through their first experiences in the HVAC/R trade, HVAC 101 provides a solid and thorough introduction to the field. It is the culmination of the efforts of industry leaders like the Air Conditioning Contractors of America

(ACCA), PHCC Educational Foundation Plumbing Apprentice & Journeyman Training Committee (PHCC Educational Foundation), and Refrigeration Service Engineers Society (RSES). Backed by these organizations and the high standards and cutting-edge resources that they are known for, the book begins with simple concepts that provide an overview of the world of HVAC/R and its main systems and components. Coverage then progresses to increasingly complex procedures, such as maintenance and inspection, installation and repair, and customer service and sales. This building-block approach, combined with numerous practical examples, makes the book the ideal resource for learning and applying key HVAC/R concepts. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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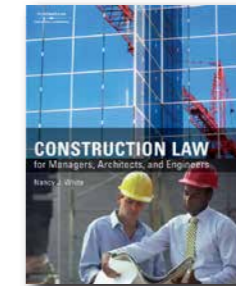
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CONSTRUCTION LAW FOR MANAGERS, ARCHITECTS, AND ENGINEERS

Nancy J. White, Central Michigan University

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The construction industry now has a clear, targeted resource for learning pertinent legal principles. Traditional books focus on general legal principles or general construction practices, while this book focuses on that critical place where the law and

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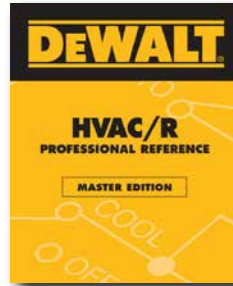
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Paul Rosenberg, Iowa State University; American Contractors Educational Services

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ELECTRICAL

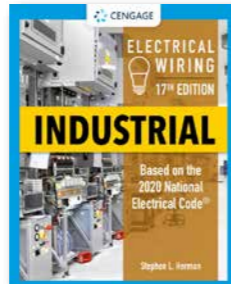
NEW EDITION

ELECTRICAL WIRING INDUSTRIAL, 17E

Stephen L. Herman, Lee College (retired)

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With step-by-step guidance and a reader-friendly style, **ELECTRICAL WIRING INDUSTRIAL**, Seventeenth Edition, helps you gain the basic knowledge and skills you need to safely install wiring systems in an industrial building. Packed with vivid, full-color

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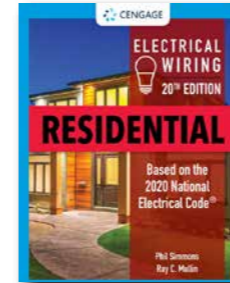
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Ray C. Mullin; Phil Simmons, Simmons Electrical Services

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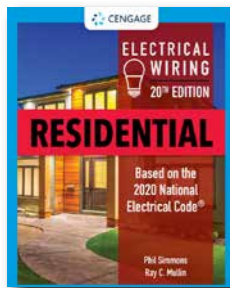
NEW EDITION

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Ray C. Mullin; Phil Simmons, *Simmons Electrical Services*

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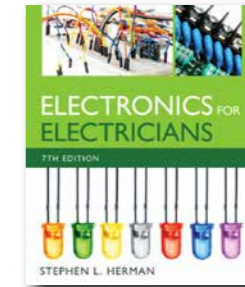
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ELECTRONICS FOR ELECTRICIANS, 7E

Stephen L. Herman, *Lee College (retired)*

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The Seventh Edition of **ELECTRONICS FOR ELECTRICIANS** is a practical and relevant guide for anyone preparing for a career in industrial settings. With its updated graphics and increased coverage of important topics, this text helps you understand

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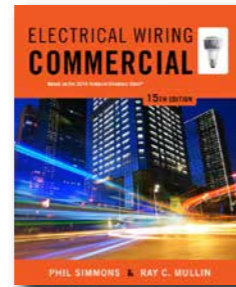
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ELECTRICAL WIRING COMMERCIAL, 15E

Phil Simmons, Simmons Electrical Services; Ray C. Mullin

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Offering the most current coverage available, **ELECTRICAL WIRING COMMERCIAL, 15e** is completely revised and up to date with the 2014 National Electrical Code®. Extremely reader friendly, the text has long been popular with learners.

Vibrant, full-color illustrations and photographs help you easily grasp difficult concepts. The new edition continues the book's emphasis on newer green technologies and developments within electrical design and installation, including coverage of EV stations in commercial settings. It also offers expansive coverage of safety in the workplace.

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1. Commercial Building Plans and Specifications. 2. Reading Electrical Working Drawings--Entry Level. 3. Calculating the Electrical Load. 4. Branch Circuits. 5. Switches and Receptacles. 6. Wiring Methods. 7. Motor and Appliance Circuits. 8. Feeders. 9. Special Systems. 10. Working Drawings--Upper Level. 11. Special Circuits (Owner's Circuits). 12. Panelboard Selection and Installation. 13. The Electric Service. 14. Lamps and Ballasts for Lighting. 15. Luminaires. 16. Emergency, Legally Required Standby, and Optional Standby Power Systems. 17. Overcurrent Protection: Fuses and Circuit Breakers. 18. Short-Circuit Calculations and Coordination of Overcurrent Protective Devices. 19. Equipment and Conductor Short-Circuit Protection. 20. Low-Voltage Remote Control. 21. The Cooling System. Appendix. Appendix A: Electrical Specifications. Appendix B: Useful Formulas. Appendix C: NEMA Enclosures Types. Appendix D: Outdoor Air Temperatures for Selected U.S. Cities. Appendix E: Metric System of Measurement. Appendix F: Glossary. Appendix

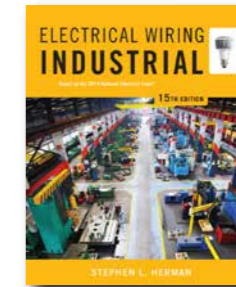
G: Web Sites. Appendix H: Electrical Symbols. Glossary. Web Sites. Code Reference Index. Index. Plans for a Commercial Building (Attached to the Inside Back Cover). Sheet A1: Plot Plan, East Elevation, West Elevation. Sheet A2: Architectural Floor Plan: Basement. Sheet A3: Architectural Floor Plan: First Floor. Sheet A4: Architectural Floor Plan: Second Floor. Sheet A5: Elevations: North and South. Sheet A6: Sections: Longitudinal, Transverse. Sheet E1: Electrical Working Drawing: Basement. Sheet E2: Electrical Working Drawing: Entry Level. Sheet E3: Second Floor Electrical Plan. Sheet E4: Panelboard & Service Schedules, One-Line Diag.

ELECTRICAL WIRING INDUSTRIAL, 15E

Stephen L. Herman, Lee College (retired)

© 2015, 352pp, Paperback, 9781285054216

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ELECTRICAL WIRING INDUSTRIAL, 15E is the complete, step-by-step guide and on-the-job reference tool for wiring industrial buildings according to the current 2014 National Electrical Code®.

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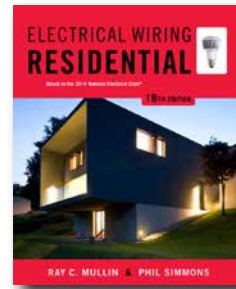
1. Plans and Sitework. 2. The Unit Substation. 3. Feeder Bus System. 4. Panelboards. 5. Trolley Busways. 6. Using Wire Tables and Determining Conductor Sizes. 7. Signaling Systems. 8. Motors and Controllers. 9. Motor Installation. 10. Power Factor. 11. Ventilating, Air Conditioning, and Other Facilities. 12. System Protection. 13. Lightning Protection. 14. Site Lighting. 15. Programmable Logic Controllers. 16. Fiber Optics. 17. Hazardous Locations. 18. Harmonics.

ELECTRICAL WIRING RESIDENTIAL, 18E

Ray C. Mullin; Phil Simmons, Simmons Electrical Services

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ebook



Delivering the very latest in industry standards and procedures, longtime market leader ELECTRICAL WIRING RESIDENTIAL, 18e continues to provide comprehensive, authoritative coverage that fully implements the 2014 National Electrical Code®.

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1. General Information for Electrical Installations.
2. Electrical Symbols and Outlets.
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4. Conductor Sizes and Types, Wiring Methods, Wire Connections, Voltage Drop, and Neutral Conductor Sizing for Services.
5. Conductor Identification, Switch Control of Lighting Circuits, Bonding/Grounding of Wiring Devices, Induction Heating.
6. Ground-Fault Circuit Interrupters, Arc-Fault Circuit Interrupters, Transient Voltage Surge Suppressors, Immersion Detection Circuit Interrupters, and Appliance Leakage Current Interrupters.
7. Luminaires, Ballasts, and Lamps.
8. Lighting Branch Circuit for the Front Bedroom.
9. Lighting Branch Circuit for the Master Bedroom.
10. Lighting Branch Circuit--Bathrooms, Hallway.
11. Lighting Branch Circuit--Front Entry, Porch.
12. Lighting Branch Circuit and Small-Appliance Circuits for the Kitchen.
13. Lighting Branch Circuit for the Living Room.
14. Lighting Branch Circuit for the Study/Bedroom.
15. Dryer Outlet, Lighting, and Receptacle Circuits for the Laundry, Powder Room, Rear Entry Hall, and Attic.
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17. Recreation Room.
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19. Special-Purpose Outlets--Water Pump, Water Heater.
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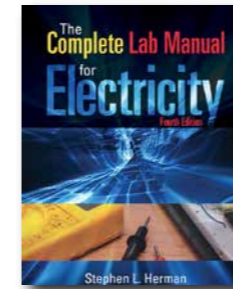
- for Ranges, Counter-Mounted Cooking Unit G, and Wall-Mounted Oven.
21. Special-Purpose Outlets--Food Waste Disposer, Dishwasher.
22. Special-Purpose Outlets for the Bathroom Ceiling Heat/Vent/Lights, the Attic Fan, and the Hydromassage Tub.
23. Special-Purpose Outlets--Electric Heating, Air Conditioning.
24. Gas and Oil Central Heating Systems.
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28. Overcurrent Protection--Fuses and Circuit Breakers.
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31. Wiring for the Future: Home Automation Systems.
32. Standby Power Systems.
33. Residential Utility Interactive Photovoltaic Systems. Specifications for Electrical Work--Single-Family Dwelling. Appendix. IAEI Membership Application Form. Key Terms. Web Sites. Index (Code and Subject). Plans for Single-Family Dwelling. Sheet 1 of 10 Basement Plan. Sheet 2 of 10 Floor Plan. Sheet 3 of 10 South (Front) Elevation; Window Schedule, Door Schedule. Sheet 4 of 10 East (Right) Elevation; Interior Elevations. Sheet 5 of 10 North (Rear) Elevation; Plot Plan. Sheet 6 of 10 West (Left) Elevation; Room Finish Schedule. Sheet 7 of 10 Section A-A. Sheet 8 of 10 Electrical Basement Plan. Sheet 9 of 10 Electrical Floor Plan. Sheet 10 of 10 Code Requirements for Swimming Pool Wiring. Blank Floor Plan First Floor. Blank Floor Plan Basement.

THE COMPLETE LAB MANUAL FOR ELECTRICITY, 4E

Stephen L. Herman, Lee College (retired)

© 2015, 480pp, Paperback, 9781133673828

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Now you can master the hands-on electrical skills you need for professional success with THE COMPLETE LABORATORY MANUAL FOR ELECTRICITY, 4E by best-selling author Stephen Herman. No matter what electrical theory book you

are using, THE COMPLETE LABORATORY MANUAL FOR ELECTRICITY offers the perfect fit with a logical progression of topics and meaningful, cost-effective experiments. Updated lab activities throughout this edition now incorporate the use of wirewound resistors rather than incandescent lamps to correspond with the latest government regulations. You explore all aspects of electrical concepts — from basic electricity through AC theory, transformers, and motor controls. Each lab offers a clear explanation of the circuits to be connected, examples of the calculations to complete the exercise, and step-by-step procedures for conducting the experiment. Trust THE COMPLETE LABORATORY MANUAL FOR ELECTRICITY, 4E as a stand-alone resource or ideal supplement (e.g., to the Delmar Standard Textbook of Electricity) for mastery of the hands-on electrical skills you need the most.

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13. Capacitance. 14. Resistive-Capacitive Series Circuits. 15. RC Parallel Circuits. 16. Resistive-Inductive-Capacitive Series Circuits. 17. Resistive-Inductive-Capacitive Parallel Circuits. 18. Power Factor Correction. SECTION 4: TRANSFORMERS AND MOTORS. 19. Transformer Basics. 20. Single-Phase Transformer Calculations. 21. Transformer Polarities. 22. Autotransformers. 23. Three-Phase Circuits. 24. Three-Phase Transformers. 25. Three-Phase Motors. SECTION 5: MOTOR CONTROLS. 26. Start-Stop Push-Button Control. 27. Multiple Push-Button Stations. 28. Forward-Reverse Control. 29. Sequence Control. 30. Jogging Controls. 31. On-Delay Timers. 32. Off-Delay Timers. 33. Changing the Logic of an On-Delay Timer to an Off-Delay Timer. 34. Designing a Printing Press Circuit. 35. Sequence Starting and Stopping for Three Motors. 36. Hydraulic Press Control Circuit. 37. Design of Two Flashing Lights. 38. Design of Three Flashing Lights. 39. Control for Three Pumps. 40. Oil Pressure Pump Circuit for a Compressor. 41. Autotransformer Starter. Index.

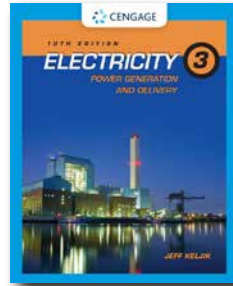
ELECTRICITY 3, 10E

Power Generation and Delivery

Jeffrey J. Keljik, Dunwoody Institute, Minneapolis, MN

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Updated to the 2011 National Electrical Code®, **ELECTRICITY 3: POWER GENERATION AND DELIVERY, 10E** explores various types of generators and the delivery of single phase and three-phase power to the customer site.

Its thorough coverage of power generation and delivery includes topics such as DC generators, polyphase circuits, three-phase wye and delta connections, electrical characteristics of three-phase alternators, alternative power sources, transformers, and more. New photos and drawings offer vivid illustrations of text concepts. An excellent resource for both students and practicing electrical workers, **ELECTRICITY 3** emphasizes electrical system operation, giving readers a solid understanding of electrical procedures and how to apply them while troubleshooting.

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Preface. 1. Operating Principles of DC Generators. 2. The Separately Excited DC Generator. 3. The Self Excited Shunt Generator. 4. Compound Wound DC Generator. 5. Summary of Units 1-4. 6. Single Phase AC Generation Principles. 7. Introduction to Polyphase Circuits. 8. The Three Phase Wye Connection. 9. The Three Phase Delta Connection. 10. Summary of Units 6-9. 11. Three Phase Alternators. 12. Engine Driven Generating Systems. 13. Control and Paralleling of Three Phase Alternators. 14. Alternate Power Sources. 15. Summary of Units 11-14. 16. Transformer Basics. 17. Single Phase Transformers. 18. The Single Phase, Three Wire Systems. 19. Single Phase Transformers Connected in Delta and Open Delta. 20. Single Phase Transformers Connected in

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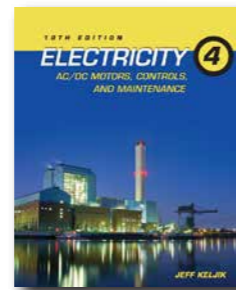
ELECTRICITY 4, 10E

AC/DC Motors, Controls, and Maintenance

Jeffrey J. Keljik, Dunwoody Institute, Minneapolis, MN

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ebook



Updated to the 2011 National Electrical Code®, **ELECTRICITY 4: AC/DC MOTORS, CONTROLS, AND MAINTENANCE, 10E** delivers practical coverage of AC/DC motors, controls, and maintenance. It offers you quick and easy access to current information on DC

motors, AC motors, motor control, electromechanical and solid-state relays and timers, synchronous motors, installation, sensyn units, motor maintenance, and more. The text combines thorough explanations of how systems work with relevant, hands-on examples of electrical system operation to help you develop troubleshooting skills. National Electrical Code®

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ELECTRICITY 2, 10E

Devices, Circuits and Materials

Thomas Kubala

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Designed to help you learn fundamental electrical concepts and explore their practical applications, this trusted text provides a thorough introduction to various types of alternating current (AC) circuits, as well as key principles such as power, power factor, power

factor correction, inductive reactance, capacitive reactance, and impedance. **ELECTRICITY 2: DEVICES, CIRCUITS AND MATERIALS, Tenth Edition**, maintains the user-friendly style and proven instructional approach while incorporating new material and updates based on the 2011 National Electrical Code®. Featuring current industry terminology, photographs of commonly used electrical equipment, and sample problems with solutions, this convenient, affordable text is an ideal choice for anyone interested in mastering basic electricity, including AC power, wiring installation, lighting, and effective troubleshooting.

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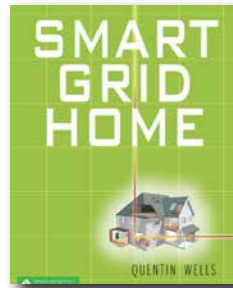
1. Alternating-Current Principles. 2. Inductance and Inductive Reactance. 3. Capacitance and Capacitive Reactance. 4. Series Circuit: Resistance and Inductance. 5. Series Circuit: Resistance and Capacitance. 6. Series Circuit: Resistance, Inductance and Capacitance. 7. AC Parallel Circuits Containing Inductance. 8. AC Parallel Circuits Containing Inductance and Capacitance. 9. AC Power, Power Factor, and Power Factor Correction. 10. Summary Review of Units 1-9. 11. Installation of a Single-Phase, Three-Wire Service Entrance for a Single-Family Residence. 12. Installation of a Single-Phase, Three-Wire Service Entrance for an Apartment Building. 13. Installation of a Three-Phase, Three-Wire Service Entrance. 14. Introduction to Fluorescent Lighting. 15. Installation of Fluorescent Lighting. 16. Summary Review of Units 11-15.

SMART GRID HOME

Quentin Wells, Salt Lake Community College

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Practical and reader-friendly, the SMART GRID HOME explains how you can adapt and retrofit an existing residence to take advantage of the energy and cost saving technology now available as part of the development of the Smart Grid. Topics covered include reducing home energy

consumption by eliminating heat loss and heat transfer, reducing the power-on time of electronics and other power equipment without loss of convenience, automating home electrical systems to maximize energy conservation, evaluating electrical devices for energy efficiency, developing energy conservation strategies for replacing inefficient appliances, and timing the use of electricity in the home to save both energy and money. Throughout each chapter the information needed to take advantage of utility and government incentive programs to offset some or all of the cost is provided. Coverage also includes the selection and installation of renewable energy source electrical generating systems such as photovoltaic solar generating systems, solar water heating systems, and wind turbine generating systems. In addition, the book describes how these home-based renewable energy systems can be connected to the smart grid so that as a homeowner, you will be paid by the public utility.

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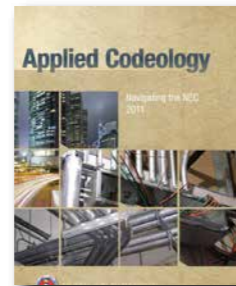
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APPLIED CODEOLOGY, 3E

Navigating the NEC® 2011

National Joint Apprenticeship Training Committee

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Revised to reflect the NEC® 2011 and packed with all-new learning features like review questions, and pre-tests and post-tests, this book is a valuable “roadmap” that will familiarize readers with the code and give them the skills and confidence to make code-compliant

installations that are safe and accurate.

PRACTICAL PROBLEMS IN MATHEMATICS FOR ELECTRICIANS, 9E

Stephen L. Herman, Lee College (retired)

© 2012, 208pp, Paperback, 9781111313470

ebook



PRACTICAL PROBLEMS IN MATHEMATICS FOR ELECTRICIANS, 9E will give you the math skills you need to succeed in the electrical trade. It introduces you to the important math principles through problems designed for the electrical profession and offers you

an excellent opportunity to develop and practice problem-solving skills while at the same time providing a valuable review of electrical terminology. This new edition uses the same straightforward writing style and simple, step-by-step explanations that made previous editions so reader-friendly. It minimizes theory and emphasizes problem-solving techniques and practice problems. This new edition also includes updated illustrations and information for a better learning experience than ever before! The book begins with basic arithmetic and then, once these basic topics have been mastered, progresses to algebra and concludes with trigonometry. Practical problems with real-world scenarios from the electrical field are used throughout, allowing you to apply key mathematical concepts while developing an awareness of basic electrical terms and practices. This is the perfect resource for students entering the electrical industry, or those simply looking to brush up on the necessary math.

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DATA, VOICE AND VIDEO CABLING, 3E

Jim Hayes, *The Fiber Optic Association*; Paul Rosenberg, *Iowa State University*

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ebook



Cabling is one of the fastest changing technologies, and Data, Voice and Video Cabling, 3rd Edition, has been updated to address all the latest developments in premises cabling, including technologies and applications in copper, fiber, and wireless cabling. This text is organized

to aid in the understanding of cabling, by following a logical format that covers background information on communications systems and media first, and then delves into more detailed discussions on each media type: copper, wireless, and fiber. Separating the key concepts into specific sections also helps to minimize confusion between the unique installation practices among the different technologies. Within each section, topics progress from the basics to components, installation, and testing to assist in the development of individual skills. This book also provides readers with important background and resources regarding the most recent cabling standards, which are an integral part of this fast-paced industry.

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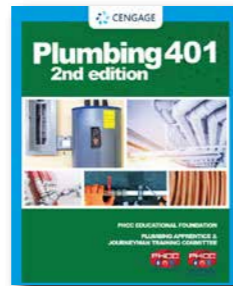
PLUMBING

PLUMBING 401, 2E

PHCC Educational Foundation Plumbing Apprentice & Journeyman Training Committee; Ed Moore, *York Technical College*

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CENGAGE | MINDTAP ebook



Created in partnership with the Plumbing-Heating-Cooling Contractors National Association Educational Foundation (PHCC) and designed for your fourth-year of plumbing apprenticeship, PLUMBING 401, Second Edition, uses a clear, reader-friendly

writing style to help you gain a thorough understanding of advanced plumbing systems. Coverage spans residential, commercial, industrial, and institutional settings and includes important topics such as service and repair, blueprint reading, installation practices, heating systems, and related science and plumbing codes (both International and Uniform). Highly practical in its approach, this series breaks down complex plumbing applications into easy-to-understand principles while introducing you to a wide variety of plumbing scenarios using engaging text and full-color illustrations. In addition to abundant examples illustrating real-world solutions to common plumbing problems, the text features a strong emphasis on safety and the latest plumbing technology. Equally valuable for both apprentice and licensed plumbers, this trusted guidebook is an ideal resource to prepare you for career success. Check out our free app DEWALT® Mobile Pro™, a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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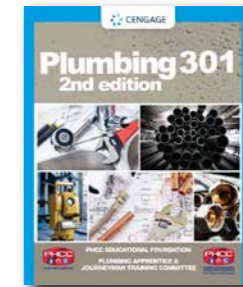
1. Service and Repair: Fixtures. 2. Service and Repair: Water and Fuel Gas Distribution. 3. Service and Repair: DWV Systems. 4. Service and Repair: DWV Systems. 5. Sizing Potable Water Lines and Fuel Gas Piping Systems. 6. Indirect and Special Wastes. 7. Protection of the Water Supply. 8. Steam Heating. 9. Hydronic Heating and Controls. 10. Forced Air Heating and Alternative Heating Systems. 11. Pumps. 12. Blueprints, Isometrics, and Material Take-Off. 13. Plumbing Codes: Administration and General Requirements. 14. Plumbing Codes: Fixtures and Fixture Fittings. 15. Plumbing Codes: Water Heaters. 16. Plumbing Codes: Water Supply and Distribution. 17. Plumbing Codes: Sanitary Drainage. 18. Plumbing Codes: Indirect Wastes. 19. Plumbing Codes: Vents. 20. Plumbing Codes: Traps and Interceptors. 21. Plumbing Codes: Storm Drainage. 22. Plumbing Codes: Fuel Gas Piping. 23. Plumbing Codes: Healthcare Facilities and Medical Gas and Vacuum Systems. 24. Plumbing Codes: Nonpotable Water Systems.

PLUMBING 301, 2E

PHCC Educational Foundation Plumbing Apprentice & Journeyman Training Committee; Ed Moore, *York Technical College*

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CENGAGE | MINDTAP ebook



Designed for your third year as a plumbing apprentice, PLUMBING 301, Second Edition, combines a visually appealing, full-color design, clear writing style, and the most current plumbing and gas code references to give you everything you need to know for both commercial

and residential plumbing. Coverage begins with basic installation practices; progresses to blueprint reading, the National Fuel Gas Code, and surveying instruments; and includes special chapters devoted to the math and science of plumbing. The Second Edition builds on this thorough foundation with new discussions of hydronic systems, LP gas systems, ejector systems, water treatment, and electrical controls and wiring, plus enhanced content on preplanning and electrical controls. Now better than ever, this valuable text gives you the tools you need to be successful as you continue your journey into the plumbing industry. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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1. Pre-planning, Productivity and Profitability. 2. Residential Fixtures and Appliances. 3. Commercial, Industrial and Institutional Fixtures and Appliances. 4. Installation Methods. 5. Fixture Fittings and Trim. 6. Principles of Hydronic Systems. 7. Blueprints and Specifications. 8. Drawing Types, Floor Plans and Site Plans. 9. Structural, Plumbing, Electrical, HVAC and Detail Plans. 10. National Fuel Gas Code, Materials and Types of Fuel Gases. 11. Fuel Gas

Piping, Fittings, Connections and Pipe Sizing. 12. Gas Appliances, Regulators, Meters and Appliance Controls. 13. Vents for Category I Appliances. 14. Fundamentals of LP. 15. Level Transit, Elevations and Grade. 16. Builders Level and Transit. 17. Offsets and Ratios. 18. Tank Capacities, Volume and Weight of Water. 19. Storm Drainage and Sizing Storm Drains. 20. Cross Connections. 21. Ejector Systems. 22. Energy and Temperature, Piping Expansion, Heat Transfer, Insulation, Humidity and Condensation. 23. Water Treatment. 24. Heat Sources for Water Heaters and Ancillary Piping. 25. Basic Electricity, Electric Current and Electric Motors. 26. Electric Circuits, Circuit Protection, Control Wiring and Electrical Safety. 27. Electric Circuit Troubleshooting.

RESIDENTIAL CONSTRUCTION ACADEMY, 3E

Facilities Maintenance: Maintaining, Repairing, and Remodeling

Kevin Standiford, Arkansas Teacher Retirement System, Little Rock, AR, Lead Program Analyst

© 2014, 592pp, Paperback, 9781133282433

ebook



Created in partnership with the Home Builders Institute (HBI), the workforce development arm of the National Association of Home Builders (NAHB), the Residential Construction Academy Series is the only program based on the National Skill Standards for

residential construction. Step-by-step illustrations and an easy-to-read writing style make RESIDENTIAL CONSTRUCTION ACADEMY: FACILITIES MAINTENANCE, 3E the powerful tool you need for any facilities maintenance course. This edition walks you through a straightforward approach that describes common maintenance tasks in detail, like carpentry, wiring, groundskeeping, appliance repair, painting, plumbing, and HVAC. Enhanced chapters on basic math and blueprint reading give you the most comprehensive training available. See the last three chapters for your energy efficiency concerns, two chapters on Weatherization and one on Solar. Plus, each section emphasizes safety and highlights the skills you can build that employers are searching for. RESIDENTIAL CONSTRUCTION ACADEMY: FACILITIES MAINTENANCE, 3RD is the manual you need to develop a solid foundation in facilities maintenance.

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1. Customer Service Skills. 2. Methods of Organizing, Trouble-shooting, and Problem Solving. 3. Applied Safety Rules. 4. Fasteners, Tools, and Equipment. 5. Practical Electrical Theory. 6. Electrical Facilities Maintenance. 7. Carpentry. 8.

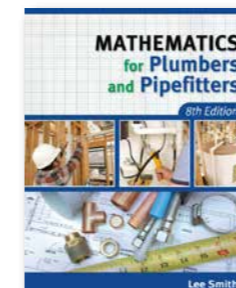
Surface Treatments. 9. Plumbing. 10. Heating, Ventilation, and Air-Conditioning Systems. 11. Appliance Repair and Replacement. 12. Trash Compactors. 13. Elevators. 14. Pest Prevention. 15. Landscaping and Groundskeeping. 16. Basic Math for Facilities Maintenance Technicians. 17. Blueprint Reading for Facility Maintenance Technicians. 18. Weatherization Concepts. 19. Weatherization Installation, Maintenance and Repair. 20. Solar Systems, Maintenance and Repair.

MATHEMATICS FOR PLUMBERS AND PIPEFITTERS, 8E

Lee Smith

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ebook



Now in its 8th edition, MATHEMATICS FOR PLUMBERS AND PIPEFITTERS delivers the essential math skills necessary in the plumbing and pipefitting professions. Starting with a thorough math review to ensure a solid foundation, the book progresses into specific on-the-job applications, such as pipe length calculations, sheet metal work, and the builder's level. Broad-based subjects like physics, volume, pressures, and capacities round out your knowledge, while a new chapter on the business of plumbing invites you to consider an exciting entrepreneurial venture. Written by a Master Plumber and experienced vocational educator, MATHEMATICS FOR PLUMBERS AND PIPEFITTERS, 8th Edition includes a multitude of real-world examples, reference tables, and formulas to help you build a rewarding career in the plumbing and pipefitting trade.

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1. Review of Fundamentals. 2. Pipe Length Calculations. 3. Sheet Metal Work. 4. Volumes, Pressures, Capacities. 5. Physics. 6. Heating. 7. The Builder's Level. 8. The Business of Plumbing.

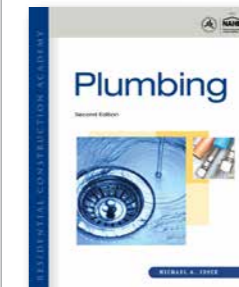
RESIDENTIAL CONSTRUCTION ACADEMY, 2E

Plumbing

Michael A. Joyce; Ray Holder

© 2012, 640pp, Hardback, 9781111307776

ebook



RESIDENTIAL CONSTRUCTION ACADEMY: PLUMBING, 2E is the ideal book to create a direct link between your education/training program and the residential construction industry. The result of a strategic partnership between the

National Association of Home Builder's (NAHB) Home Builders Institute and Delmar, Cengage Learning, the Residential Construction Academy Series is the perfect way to learn essential workplace skills for readers new to the building trades. Written in partnership with the Home Builders Institute, and endorsed by NAHB, RESIDENTIAL CONSTRUCTION ACADEMY: PLUMBING, 2E provides a step-by-step approach to residential plumbing installations based on national skill standards. Focusing on "Green" advancement in the plumbing trades, this book thoroughly explains the process of installing residential plumbing systems by exploring topics such as tools of the trade and proper safety measures and by offering various tips to increase readers' on-the-job productivity. Logically organized to build a foundation of knowledge, this book progresses from the installation of common fixtures to troubleshooting techniques that will aid readers. An emphasis on creative layout and the importance

of understanding code variations will foster readers' understanding of plumbing system installation that is based on typical situations as well as unique jobsite conditions.

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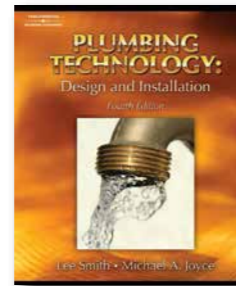
1. Tools and Materials. 2. Hand Tools. 3. Power Tools. Pipe. Fittings. 4. Valves and Device. 5. Fixtures and Equipment. 6. Fixtures. 7. Faucets and Drain Assemblies. 8. Equipment Layout and Installation. 9. Blueprint Reading and Drafting. 10. Layout and Material Organization. 11. Water Service Installation. 12. Water Distribution Installation. 13. Drainage Waste and Vent Segments. 14. Drainage Waste and Vent Installation. 15. Fixture and Equipment Installation. 16. Troubleshooting. 17. Plumbing Repairs and Troubleshooting. 18. Hydronic Heating Systems.

PLUMBING TECHNOLOGY, 4E

Design and Installation
Lee Smith; Michael A. Joyce

© 2008, 576pp, Hardback, 9781418050917

ebook



Prepare for a career in the commercial or residential plumbing fields with this popular book, which has been updated to reflect the very latest advancements in the plumbing industry. Plumbing Technology: Design and Installation, 4E has also been restructured to begin with

instruction on the major, introductory concepts, and then progressing to more specific, advanced lessons, allowing readers a complete and thorough understanding of the material. This edition includes coverage of the very latest products, tools, codes, and drain cleaning equipment that have had a remarkable impact on the plumbing industry and how plumbers work successfully. The latest water heater technology, such as Flammable Vapor Ignition Resistant heaters, DWV system segments and sizing, new safety regulations, and all relevant code changes are also addressed.

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Chapter 1 Plumbing Basics Chapter 2 Safety Chapter 3 Pipe, Valves, and Fittings Chapter 4 Blueprint Reading and Drafting Chapter 5 Trade Math and Formulas Chapter 6 Fixture Types Chapter 7 Faucets and Drain Assemblies Chapter 8 Fixture Installation Chapter 9 Introduction to Water Supply Chapter 10 Water Supply Installations Chapter 11 Water Heater Theory and Principles Chapter 12 Water Heater Types and Installations Chapter 13 Water Heater Devices Chapter 14 DWV System Identification Chapter 15 DWV Layout Considerations Chapter 16 Drainage, Waste and Vent Systems Chapter 17 Roof Drain Systems and Sewer and Drain Cleaning Chapter 18 Sizing Drainage, Waste, and Vent Systems Chapter 19 Sizing Natural Gas Piping, Water Piping, and Water Heaters

CULINARY, HOSPITALITY, TRAVEL & TOURISM

CULINARY

THE THEORY OF HOSPITALITY AND CATERING, 13E

David Foskett, London School of Hospitality and Tourism; Victor Ceserani

© 2016, 0pp, Paperback, 9781471865237



Offering a complete overview of the hospitality and catering industry for over 50 years, this new edition of the essential reference text has been updated to reflect latest developments and current issues. Covering all aspects of the industry - from

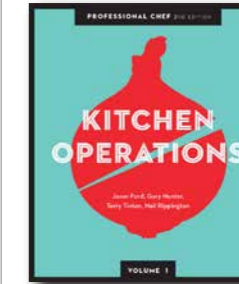
commodities and nutrition, to planning, resourcing and running each of the key operational areas - The Theory of Hospitality and Catering is an essential text for anyone training to work in the hospitality industry. It will be valuable to anyone completing courses in Professional Cookery and Hospitality Supervision, as well as hospitality management and culinary arts students. Supporting learning and training delivery in: • SIT30916 Certificate III in Catering Operations • SIT40616 Certificate IV in Catering Operations

PROFESSIONAL CHEF: KITCHEN OPERATIONS, 2E

Jason Ford, Southern Queensland Institute of TAFE; Gary Hunter, Westminster Kingsway College; Terry Tinton, Westminster Kingsway College; Neil Rippington, Colchester Institute

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ebook



All the fresh ingredients you need for a successful career in Commercial Cookery. Now in a brand new, two-book split edition, Professional Chef 2e is available as Kitchen Operations (Volume 1) covering core units from SIT20312 Certificate II in

Kitchen Operations qualification and as Commercial Cookery (Volume 2) covering core units from SIT30813 Certificate III in Commercial Cookery qualification. Professional Chef 2e is the ultimate guide for aspiring chefs looking to excel in their studies and make progress toward a rewarding and stimulating career. It clearly explains the skills, techniques and theory needed to excel in your studies, succeed in the kitchen and compete for some of the finest jobs in the catering industry.

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1. Work effectively with others 2. Participate in safe work practices 3. Use hygienic practices for food safety 4. Clean kitchen premises and equipment 5. Maintain the quality of perishables 6. Use food-preparation equipment 7. Produce simple dishes using basic methods 8. Use cookery skills effectively 9. Produce salads and appetisers 10. Produce stocks, sauces and soups 11. Produce vegetable, fruit, egg and farinaceous dishes 12. Preparing sandwiches 13. Participate in safe food-handling practices 14. Participate in environmentally sustainable work practices

BASIC COOKERY FOR FOUNDATION LEARNING

Keyth Richardson; David Foskett, London School of Hospitality and Tourism; Patricia Paskins, London School of Hospitality and Tourism; Steve Thorpe

© 2014, 0pp, Paperback, 9781471808197



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FOOD AND BEVERAGE SERVICE

For Levels 1 & 2

Dennis Lillicrap; John Cousins; Suzanne Weekes

© 2014, 0pp, Paperback, 9781471807916



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MATHS & ENGLISH FOR HOSPITALITY AND CATERING

Functional Skills

Andrew Spencer, teaches secondary education in New South Wales and South Australia.; Neil Rippington, Colchester Institute

© 2013, 64pp, Paperback, 9781408072691

ebook



This write-in workbook is an invaluable resource to help learners improve their Maths and English skills and prepare for Level 1 and Level 2 Functional Skills exams. The workbook format enables learners to practice and improve their maths and English skills

and the real-life questions, exercises and scenarios are all written with a Catering and Hospitality context to help students find essential Maths and English theory understandable, engaging and achievable. This workbook is an invaluable resource to support Maths and English learning in the classroom, at work and for personal study at home.

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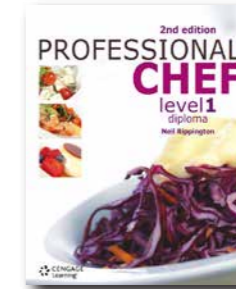
Chapter Title English Unit 1 Spelling Unit 2 Alphabetising Unit 3 Comprehension Unit 4 Grammar Unit 5 Punctuation Unit 6 Formal letter writing Maths Unit 7 General mathematics Unit 8 Basic operations Unit 9 Decimals Unit 10 Fractions Unit 11 Percentages Unit 12 Measurement conversions Unit 13 Earning wages Unit 14 Squaring numbers Unit 15 Vouchers Unit 16 Deals Unit 17 Reading, interpreting and understanding information in tables and Charts Unit 18 Practice written exam for the Hospitality and Catering Industry industry

PROFESSIONAL CHEF LEVEL 1 DIPLOMA, 2E

Neil Rippington, Colchester Institute

© 2011, 256pp, Paperback, 9781408039083

ebook



Professional Chef Level 1 Diploma, 2nd edition follows on from the extremely well received 1st edition and ensures learners have the foundation of theoretical and practical knowledge they need to start a successful career. This edition provides clear

mapping to Level 1 VRQ units on the revised QCF while maintaining a clear, easy to follow style and the popular pedagogical features such as 'Chefs Tips', Health & Safety and 'Quality Points'. Building on the previous edition, this textbook boasts updated images and recipes, expanded information on careers and the catering industry, extended glossary and much more! For the complete blended learning solution this book can be used alongside Professional Chef Online which is designed to support students and tutors and make theory interactive and engaging. This solution offers a host of resources including quizzes, online games, a searchable eBook, bonus recipes, an interactive food map of the British Isles, and over 140 video master chef classes!

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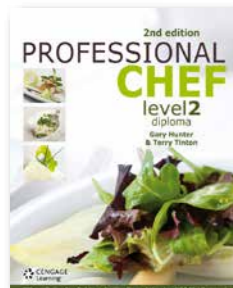
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PROFESSIONAL CHEF LEVEL 2 DIPLOMA, 2E

Gary Hunter, Westminster Kingsway College; Terry Tinton, Westminster Kingsway College

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ebook



Professional Chef Level 2 Diploma, 2nd edition is THE guide for learners looking to take their professional cookery skills to the next level! With clear mapping to both the NVQ and VRQ syllabus, this is the most relevant and up-to-date level 2 Professional Cookery

book on the market. New and updated recipes now include professional photographs of the finished dish to help you develop your presentation skills on the road to becoming a Professional Chef. This comprehensive, easy-to use textbook combines theory and practice and provides a thorough introduction to all the skills and techniques required to work in a professional kitchen! For the complete blended learning solution this book can be used alongside Professional Chef Online which is designed to support students and tutors and make theory interactive and engaging. This solution offers a host of resources including quizzes, online games, a searchable eBook, bonus recipes, an interactive food map of the British Isles, and over 140 video master chef classes!

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the book 1 The hospitality industry and your role as a chef 2 Health, safety and food hygiene in catering and hospitality 3 Cold food preparations, starters and salads 4 Stocks and sauces, soups 5 Pulses, grains, pasta and rice 6 Eggs 7 Fish and shellfish 8 Poultry 9 Game 10 Meat and offal 11 Vegetables, fruits and vegetable protein 12 Pastes, tarts and pastries 13 Breads and dough 14 Desserts 15 Cakes, biscuits and sponges 16 Healthy foods and special diets Glossary Recipe Index General Index

THE THEORY OF HOSPITALITY AND CATERING, 13E

David Foskett, London School of Hospitality and Tourism; Victor Ceserani

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Offering a complete overview of the hospitality and catering industry for over 50 years, this new edition of the essential reference text has been updated to reflect latest developments and current issues. Covering all aspects of the industry - from

commodities and nutrition, to planning, resourcing and running each of the key operational areas - The Theory of Hospitality and Catering is an essential text for anyone training to work in the hospitality industry. It will be valuable to anyone completing courses in Professional Cookery and Hospitality Supervision, as well as hospitality management and culinary arts students. Supporting learning and training delivery in: • SIT30916 Certificate III in Catering Operations • SIT40616 Certificate IV in Catering Operations

A TASTE FOR WRITING, 2E

Composition for Culinaricians

Vivian C. Cadbury

© 2015, 648pp, Paperback, 9781133277910

ebook



A TASTE FOR WRITING: COMPOSITION FOR CULINARIANS, Second Edition is the ideal resource to help culinary arts students and professionals master key grammar principles and writing practices while learning to express themselves as confidently

on the page as they do in the kitchen. The author's signature writing style is engaging and accessible. Drawing on the language of food and cooking, she explains even the most difficult topics in a way sure to spark students' interest and encourage mastery of the material. Key concepts are brought to life through the analysis of student and professional writing samples, as well as the use of vivid examples from the food industry and popular culture. A variety of exercises leads students through all phases of the writing process, from the creative right-brain activities of generating ideas and writing a first draft to the analytical left-brain skills required for effective revision and editing. Although created specifically for culinary arts students and professionals, this one-of-a-kind book can be used by all readers to develop their skills in – and taste for – writing.

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BASIC COOKERY FOR FOUNDATION LEARNING

Keyth Richardson; David Foskett, London School of Hospitality and Tourism; Patricia Paskins, London School of Hospitality and Tourism; Steve Thorpe

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FOOD AND BEVERAGE SERVICE

For Levels 1 & 2

Dennis Lillicrap; John Cousins; Suzanne Weekes

© 2014, 0pp, Paperback, 9781471807916



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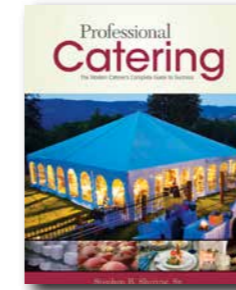
1: Level One Investigating the catering and hospitality industry 2: Level Two The hospitality industry 2: Level Two Food and beverage operations 1: Level One Underpinning knowledge and skills 2: Level Two Service areas and equipment 2: Level Two Cellar work 2: Level Two Applying personal workplace skills 2: Level Two Legislation in food and beverage service 2: Level Two Health, safety and security 2: Level Two Food safety 2: Level Two Principles of customer service 1: Level One Menu and beverage product knowledge 2: Level Two Menus and menu planning 2: Level Two Menu knowledge 2: Level Two Wine and drink lists 2: Level Two Non-alcoholic beverages (soft drinks) 2: Level Two Hot beverages 2: Level Two Alcoholic beverages 1: Level One Service skills 2: Level Two Essential technical skills 2: Level Two Preparation for service 2: Level Two Taking customer orders 2: Level Two Food service skills 2: Level Two Beverage service skills 2: Level Two Bookings, billings and revenue control 1: Level One Annex: Cocktails and mixed drinks

PROFESSIONAL CATERING

Dr. Stephen B. Shiring, Indiana University of Pennsylvania

© 2014, 416pp, Hardback, 9781133280781

ebook



PROFESSIONAL CATERING equips readers with the knowledge and tools to start and position a competitive catering business. It addresses industry best practices and emerging trends while taking a practical approach to resources that can be used in implementing business plan. Beautifully illustrated with four-color photography, this easy-to-read text is packed with Tips from the Trade, Ingredients for Success, standard operating procedures, checklists, forms, and hands-on applications designed to develop critical thinking skills. Comprehensive information is provided on each functional catering management task--planning, organizing, influencing, and controlling--helping readers strategically craft a long-term strategy to create a profitable catering operation. It also offers thorough coverage of the business plan, finding and keeping the right client, designing a sustainable operation, resolving conflict, social media, managing risk, understanding legal issues, adhering to FDA and OSHA guidelines, partnering with the event planner to exceed a client's needs, and much more. PROFESSIONAL CATERING is the ideal resource for managing catering profitability.

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Implementing. 13. Controlling. 14. Understanding Risk Management, Insurance and Legal Issues. PART III: GAINING A COMPETITIVE EDGE. 15. Beverage Management. 16. Conflict Resolution. 17. Sustainable Catering: One Ecological Step at a Time. 18. Human Resource Management of Catering. Appendix A: Ingredients for Success. Appendix B: Weights, Measures, and Abbreviations. Appendix C: Sample Business Plan.

PROFESSIONAL PATISSERIE

BURKE/BARKER/RIPPINGTON

© 2014, 0pp, Paperback, 9781444196443



Invest in the future: Professional Patisserie covers all the knowledge needed to learn or enhance the specific skills required to excel at Levels 2 and 3 or in a career as a pastry chef. Written by leading chef lecturers who have been pastry chefs at the

Ritz and Claridge's, Professional Patisserie covers everything needed to help develop industry-standard skills and knowledge whether starting at Level 2, working towards Level 3, or looking to advance current skills further.

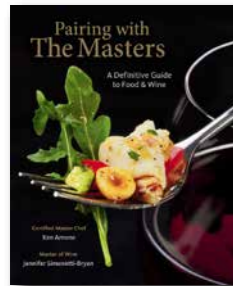
PAIRING WITH THE MASTERS

A Definitive Guide to Food and Wine

Ken Arnone; Jennifer Simonetti-Bryan

© 2013, 288pp, Paperback, 9780357671375

ebook



Discover how professionals match the perfect wines to cuisine with **PAIRING WITH THE MASTERS: A DEFINITIVE GUIDE TO FOOD AND WINE, 1ST Edition**. Certified Master Chef Ken Arnone and Master of Wine Jennifer Simonetti-Bryan bring their

unmatched expertise and insider secrets to this one-of-a-kind book to enlighten professionals, enthusiasts, and novices alike. From simple classics to the complex and modern, nearly 100 recipes demonstrate varied cooking techniques, discuss flavor profiles, and outline the appropriate steps for choosing accompanying wines. More than a list of pairings, **PAIRING WITH THE MASTERS: A DEFINITIVE GUIDE TO FOOD AND WINE, 1ST Edition** delves into the decision-making process, illustrating why certain combinations work and some don't, how to avoid common pitfalls, and imparting the skills necessary for you to develop successful food and wine pairings on your own.

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Prologue. 1. INTRODUCTION. Concept & Methodology. 5 Reasons Food & Wine Pairings Fail. 2. FOOD & WINE PRIMERS. 3. FISH. 4. SHELLFISH. 5. CHICKEN, DUCK & PORK. 6. BEEF, LAMB & VENISON. 7. PASTA & PIZZA. 8. DESSERTS. Summaries & Helpful Stuff. Glossary. Index.

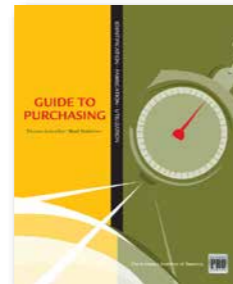
KITCHEN PRO SERIES

Guide to Purchasing

Thomas Schneller, *Culinary Institute of America*; Brad Matthews, *The Culinary Institute of America*; Culinary Institute of America, *Culinary Institute of America, Hyde Park, NY*

© 2012, 320pp, Hardback, 9781428319882

ebook



The **KITCHEN PRO SERIES: GUIDE TO PURCHASING**, 1st edition instructs those in the food industry who would be procuring ingredients and equipment. The text is written to aid the reader in understanding the importance of creating and

maintaining working relationships with product vendors. Since the food industry is full of trends that change frequently, **GUIDE TO PURCHASING** will help those in the position of buyer to understand the importance of trends and how to make the right decision in ordering ingredients by writing product specifications for food service vendors. This text will not only serve as a reference tool and guide for those in the field but is also written so that the reader will learn a variety of purchasing options and specifications. Critical issues such as the benefits of whether equipment should be leased or purchased, the importance of properly identifying ingredients, securing the proper vendor and then receiving, storing and organizing deliveries are addressed by relating real-life situations so that those facing those issues will have firsthand knowledge on what works in handling these situations. This text is the sixth in the series and will serve as a link to all the others in the series.

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About the CIA. Author Biography. Acknowledgements. Introduction. 1. History of Food Purchasing. 2. Dealing With Purveyors and Establishing a Vendor Relationship. 3. Developing Food Orders. 4. Ordering for Meat, Poultry, and Fish. 5. Inventory Management and the Storeroom. 6. Small and Large

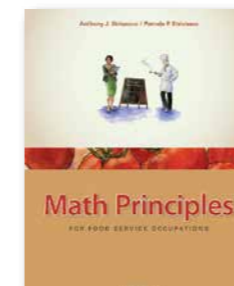
Equipment Purchasing. 7. Trends in the Industry. Glossary. Index. Photo Credits. CIA Conversion Charts.

MATH PRINCIPLES FOR FOOD SERVICE OCCUPATIONS, 6E

Anthony J. Strianese, *Schenectady County Community College, Schenectady, New York*; Pamela P. Strianese, *North Colonie Central Schools, Loudonville, New York*

© 2012, 384pp, Hardback, 9781435488823

ebook



MATH PRINCIPLES FOR FOOD SERVICE OCCUPATIONS, 6E stresses the direct relevance of math skills in the food service industry while teaching the basic math principles that affect everything from basic recipe preparation to managing

food and labor costs in a restaurant operation. All the mathematical problems and concepts presented are explained in a simplified, logical, step-by-step manner. New to this edition, illustrations in full color add visual appeal to the text and help you master important concepts. Now in its 6th edition, this book demonstrates the importance of understanding and using math concepts to effectively make money in this demanding business. Part 1 explains how to use a calculator. Part 2 reviews basic math fundamentals. The following parts address math essentials and cost controls in food preparation and math essentials in food service record keeping, while the last part of the book concentrates on managerial math. New topics to this 6th edition include controlling beverage costs; clarifying and explaining the difference between fluid ounces and avoirdupois ounces; and an entire new section on yield testing and how to conduct these tests. There are new methods using helpful memory devices and acronyms to help you remember procedures and formulas, such as BLT, NO, and the Big Ounce.

New strategies and charts are also shown and explained on how to use purchases in order to control food and beverage costs and how transfers affect food and beverage costs. In addition, sections have been added on how to control costs using food (or liquor, or labor) cost percentage guidelines. The content in **MATH PRINCIPLES FOR FOOD SERVICE OCCUPATIONS, 6E** meets the required knowledge and competencies for business and math skills as required by the American Culinary Federation.

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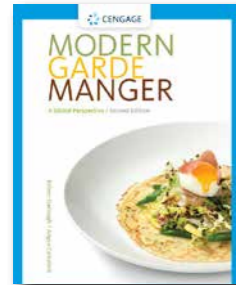
MODERN GARDE MANGER, 2E

A Global Perspective

Robert B. Garlough, Secchia Institute for Culinary Education, Grand Rapids Community College, Grand Rapids, Michigan; Angus Campbell

© 2012, 800pp, Hardback, 9781111307615

ebook



The second edition of MODERN GARDE MANGER: A GLOBAL PERSPECTIVE, was written for both the working chef and the serious student engaged in the practice and study of culinary arts. The first edition was winner of the International Association

of Culinary Professionals (IACP) Cookbook Award. Its carefully researched information and fully tested recipes span the international spectrum of the modern garde manger station. Four sections covering twenty chapters focus on the chef's required knowledge and responsibilities. This second edition has been reorganized to provide a clearer transition from subject to subject, and skill set to skill set. Special features include: Chapter Goals; Professional Profiles; Ask the Expert; People, Places, Things; Review Questions; Activities and Applications; and Key Words in Review. The text contains material on molecular cuisine, plus creative equipment used by garde manger chefs. There are more than 800 four-color photographs of which more than 300 are new, including many finished plates, platters, showpieces and step-by-step procedures, plus many additional recipes and expanded content on food show competition, buffet table layouts, ice sculpting techniques and more. While Modern Garde Manger, 2e still retains its exposure to international recipes and techniques, more traditionally American recipes and techniques have been included in this edition. MODERN GARDE MANGER 2E is the most comprehensive book of its kind available for today's student and professional chef. In addition, a CourseMate website is available to accompany the text. CourseMate includes: an interactive eBook

and interactive teaching and learning tools including quizzes, flashcards, crossword puzzles, PowerPoint® slides and more.

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KITCHEN PRO SERIES: GUIDE TO CHEESE IDENTIFICATION, CLASSIFICATION, AND UTILIZATION

Culinary Institute of America, Culinary Institute of America, Hyde Park, NY; John Fischer

© 2011, 256pp, Hardback, 9781435401174

ebook



Kitchen Pro Series: Guide to Cheeses Identification, Classification, and Utilization is the definitive guide to purchasing and utilizing cheese for professional chefs, foodservice personnel, culinarians, and food enthusiasts. Part of the

CIA's new Kitchen Pro Series focusing on kitchen preparation skills, this user-friendly, full-color resource discusses the basic history of cheese, its manufacture, and its incorporation into different cuisines across the dining spectrum. Product identification, availability, storage, flavor and development are all described in detail in this invaluable introduction to the world of cheese!

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Cheese and Pecan Napoleon Homemade Ricotta Herb-Marinated Yogurt Cheese Belgian Endive au Gratin Grilled Trevigiano with Smoked Scamorza Paneer Paratha

MODERN FOOD SERVICE PURCHASING

Business Essentials to Procurement

Robert B. Garlough, Secchia Institute for Culinary Education, Grand Rapids Community College, Grand Rapids, Michigan

© 2011, 864pp, Hardback, 9781418039646

ebook



MODERN FOOD SERVICE PURCHASING is designed specifically to provide culinary arts professionals with current, in-depth coverage of the essential concepts of purchasing, storeroom operations, and financial stewardship. This comprehensive resource

brings together under one cover the four fundamentals of contemporary food service purchasing: Market and distribution systems Storeroom operations Cost controls Product information Delivering a chef-focused overview of financial management and the formulas used to control a successful business, Modern Food Service Purchasing explains in detail how to set up a successful storeroom operation while providing chefs and buyers with a comprehensive reference that will deliver value for years to come. Extensive color photography, useful charts and forms, and a comprehensive glossary of key terms round out the coverage.

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Part I. Procurement: Dynamics of Food Service Purchasing. 1. The Purchasing Function: An Overview. 2. Food Laws and the Market and Distribution Systems. 3. Practical Considerations for Buying Decisions 4. Modern Applications of

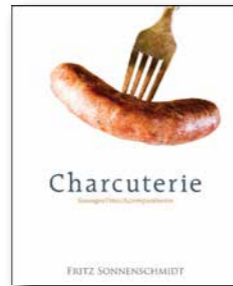
Food Science. Part II. Purchasing Management: Mastering the Storeroom. 5. Measuring and Packaging for Preservation, Sale, and Distribution. 6. The Ingredient Process. 7. The Physical Storeroom. 8. Receiving, Storing, and Issuing. 9. Cost Control Measures for Food Service Operations. 10. Security Issues with Vendors, Employees and Customers. Part III. The Commodities: Developing Product Knowledge. 11. Herbs, Spices, Minerals, and Flavoring Agents. 12. Bakery Supplies. 13. Meats and Offal. 14. Poultry and Game. 15. Fish and Shellfish. 16. Fruits. 17. Vegetables. 18. Eggs, Dairy, and Cheese. 19. Vegetarian and Special Dietary Products. 20. Beverages. 21. Postscript: Futurist Thoughts on Food Service Appendix A. Financial and Cost Control Formulas. Appendix B. Standard Measurement Conversions. Appendix C. Approximate Ingredient Volume to Weight Equivalents. Appendix D. Management Checklists. Appendix E. Cost Control Forms. Appendix F. Food Service Industry Resources. Appendix G. State Alcohol Control Boards. Appendix H. Hospitality Professional Organizations. Appendix I. Commodity Organizations.

CHARCUTERIE

Sausages, Pates and Accompaniments
Fritz H. Sonnenschmidt

© 2010, 320pp, Paperback, 9781428319912

ebook



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KITCHEN PRO SERIES

Guide to Meat Identification, Fabrication and Utilization
Culinary Institute of America, Culinary Institute of America,
Hyde Park, NY; Thomas Schneller, Culinary Institute of America

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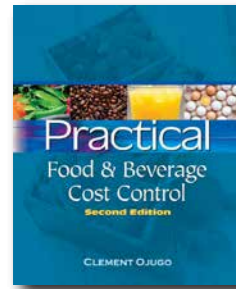
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PRACTICAL FOOD AND BEVERAGE COST CONTROL, 2E

Clement Ojugo

© 2010, 488pp, Paperback, 9781428335448

ebook



Regardless of your position in restaurant management, your goals will include cost control, and may at times conflict with the goals of other team members. This book teaches you how to systematically analyze your operations and determine the best course of action.

Practical Food and Beverage Cost Control, 2e is designed to share successful cost management strategies and procedures with anyone who wishes to update or renew their cost control knowledge. Details on how to plan, assess and interpret the many cost control aspects of food and beverage operations are included along with vital financial information to meet the company's profit and expense objectives. While emphasis is placed on the perspective of the "the manager", focus is placed on the importance of the restaurant management team working together toward minimizing expenses and maximizing profit. With practical inclusions and helpful forms, this resource can be put to use today in any foodservice application.

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Chapter 1: Overview of the Industry and the Managers Role Chapter 2: Menu Development Part 1: Purchasing Standards Chapter 3: Introduction to Purchasing Chapter 4: Purchase Specifications Chapter 5: Price and the Vendor Chapter 6: Purchasing Controls Part 2: Beverage Standards Chapter 7: Introduction to Beverages Chapter 8: Beverage Procedures, From Start to Finish Chapter 9: Beverage Controls and Service Procedures Part 3: Cost Control Standards Chapter 10: Planning for Food Profit and Controls Chapter 11: Monthly Physical Inventory and Monthly Food

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THE KITCHEN PRO SERIES

Guide to Poultry Identification, Fabrication and Utilization

Thomas Schneller, Culinary Institute of America

© 2010, 320pp, Hardback, 9781435400382

ebook



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ADVANCED BREAD AND PASTRY

Michel Suas

© 2009, 1056pp, Hardback, 9781418011697

ebook



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INTERNATIONAL CUISINE

Jeremy MacVeigh

© 2009, 557pp, Hardback, 9781418049652

ebook



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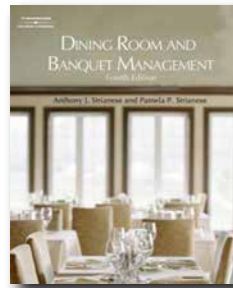
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DINING ROOM AND BANQUET MANAGEMENT, 4E

Anthony J. Strianese, Schenectady County Community College, Schenectady, New York; Pamela P. Strianese, North Colonie Central Schools, Loudonville, New York

© 2008, 416pp, Paperback, 9781418053697



This text is for the introductory course in a hospitality management program that covers dining room and banquet management. Its emphasis is on the service aspects of a business that will distinguish an outstanding dining experience. The text

includes the history of dining room and banquet service, the proper techniques of service, sanitation requirements, and important merchandising concepts. Information about reservations, priority seating, and reservations systems is also included. This new edition is updated with a number of new features. The most noteworthy are the “Chefs’ Choice” professional profiles that spotlight noted individuals in the hospitality industry. These profiles cover the essentials in creating and maintaining a successful dining room and banquet operation. Each chapter also has been updated with key words and terms, more thorough objectives, and numerous discussion questions to help students retain the material. And finally, Dining Room and Banquette Management 5E now offers an electronic instructional support CD-ROM that includes PowerPoints, Computerized Test Bank, Instructor’s Manual and Lesson Plans.

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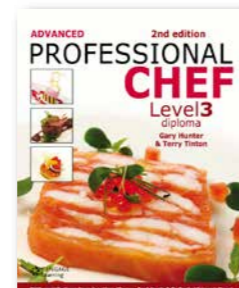
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ADVANCED PROFESSIONAL CHEF LEVEL 3 DIPLOMA, 2E

Gary Hunter, Westminster Kingsway College; Terry Tinton, Westminster Kingsway College

© 2013, 544pp, Paperback, 9781408064214

ebook



Advanced Professional Chef Level 3 Diploma, 2e is for chefs who want to reach the top. Written to provide complete coverage of both NVQ and VRQ Level 3 qualifications, this fully revised new edition will help learners perfect the superior skills needed to excel in

today’s challenging kitchens. Advanced Professional Chef is packed full of recipes covering a comprehensive selection of exciting and challenging dishes, inspired by modern, classical and international techniques. With a focus on developing professional culinary knowledge, the book provides step-by-step guidance on how to carry out specialist butchery, larder and fishmonger techniques alongside clear explanations of all the underpinning theory for assessments.

CONTENTS

1. Supervisory skills in the hospitality industry 2. Principles of supervising food safety in catering 3. Practical gastronomy 4. Cold larder and farinaceous 5. Advanced soups, sauces and dressings 6. Vegetables and vegetarian dishes 7. Meat dishes 8. Poultry and game dishes 9. Fish and shellfish 10. Pastry and patisserie 11. Dough and fermented products 12. Hot, cold and frozen desserts 13.

Cakes, sponges and petit fours 14. Chocolate products and decorative items 15. Sugar and marzipan based products and décor 16. Food product development and sous-vide concepts 17. Healthier dishes

CHARCUTERIE

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Fritz H. Sonnenschmidt

© 2010, 320pp, Paperback, 9781428319912

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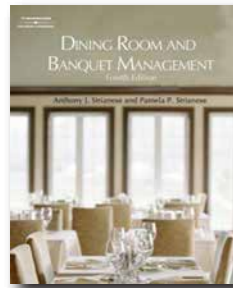
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CULINARY, HOSPITALITY

FOOD AND BEVERAGE SERVICE, 9E

John Cousins; Suzanne Weekes; Dennis Lillicrap

© 2014, 0pp, Paperback, 9781471807954



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1. The foodservice industry 2. Staff attributes, skills and knowledge 3. Food and beverage service areas and equipment 4. The menu, menu knowledge and accompaniments 5. Beverages: non-alcoholic and alcoholic 6. The service sequence: table service 7. The service sequence: self service, assisted service and single-point service 8. The service of breakfast and afternoon tea 9. Specialised forms of service 10. Enhanced service techniques 11. Events 12. Supervisory aspects of food and beverage service Annex A: Glossary of cuisine and service terms Annex B: Cocktail and mixed drink listing and recipes Annex C: Cigars Index

FOOD AND BEVERAGE SERVICE S/ NVQ LEVELS 1 & 2

Zoe Adjey, Westminster Kingsway College; Gary Hunter, Westminster Kingsway College

© 2009, 362pp, Paperback, 9781408007426

ebook



Food and Beverage Service is THE book to help students develop their professional skills in the hospitality industry. Written by authors with years of experience in industry and training, you can be confident that this comprehensive textbook will cover everything that learners need to know for their level 1 and 2 S/NVQ food and beverage service course.

CONTENTS

1. Maintain a safe, hygienic and secure working environment 2. Contribute to effective teamwork 3. Give customers a positive impression of yourself and your organisation 4. Maintain food safety when storing holding and serving food Food Service 5. Prepare, serve and clear areas for table/tray service 6. Provide a trolley service 7. Assemble meals for distribution via conveyor belt 8. Clean and store crockery and cutlery 9. Prepare, serve and clear areas for counter/takeaway service 10. Prepare and clear areas for table service 11. Serve food at the table 12. Provide a silver service 13. Provide a buffet/carvery service 14. Maintain and deal with payments Drinks Service 15. Prepare and clear the bar and drinks service area 16. Serve alcoholic and soft drinks 17. Prepare and serve cocktails 18. Prepare and serve wines 19. Prepare cellars and kegs 20. Clean drinks dispense lines 21. Receive, handle and store drinks stock 22. Maintain a vending machine 23. Prepare and serve dispensed and instant hot drinks 24. Prepare and serve hot drinks using specialist equipment Prelims and End matter Glossary of Culinary Terms and Beverages - and Prelims (foreword, dedication, about the qualification etc)

FOOD SERVICE MANAGEMENT

KITCHEN PRO SERIES

Guide to Purchasing

Thomas Schneller, Culinary Institute of America; Brad Matthews, The Culinary Institute of America; Culinary Institute of America, Culinary Institute of America, Hyde Park, NY

© 2012, 320pp, Hardback, 9781428319882

ebook



The KITCHEN PRO SERIES: GUIDE TO PURCHASING, 1st edition instructs those in the food industry who would be procuring ingredients and equipment. The text is written to aid the reader in understanding the importance of creating and

maintaining working relationships with product vendors. Since the food industry is full of trends that change frequently, GUIDE TO PURCHASING will help those in the position of buyer to understand the importance of trends and how to make the right decision in ordering ingredients by writing product specifications for food service vendors. This text will not only serve as a reference tool and guide for those in the field but is also written so that the reader will learn a variety of purchasing options and specifications. Critical issues such as the benefits of whether equipment should be leased or purchased, the importance of properly identifying ingredients, securing the proper vendor and then receiving, storing and organizing deliveries are addressed by relating real-life situations so that those facing those issues will have firsthand knowledge on what works in handling these situations. This text is the sixth in the series and will serve as a link to all the others in the series.

CONTENTS

About the CIA. Author Biography. Acknowledgements. Introduction. 1. History of Food Purchasing. 2. Dealing With Purveyors and Establishing a Vendor Relationship. 3. Developing Food Orders. 4.

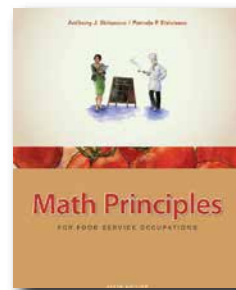
Ordering for Meat, Poultry, and Fish. 5. Inventory Management and the Storeroom. 6. Small and Large Equipment Purchasing. 7. Trends in the Industry. Glossary. Index. Photo Credits. CIA Conversion Charts.

MATH PRINCIPLES FOR FOOD SERVICE OCCUPATIONS, 6E

Anthony J. Strianese, *Schenectady County Community College, Schenectady, New York*; Pamela P. Strianese, *North Colonie Central Schools, Loudonville, New York*

© 2012, 384pp, Hardback, 9781435488823

ebook



MATH PRINCIPLES FOR FOOD SERVICE OCCUPATIONS, 6E stresses the direct relevance of math skills in the food service industry while teaching the basic math principles that affect everything from basic recipe preparation to managing

food and labor costs in a restaurant operation. All the mathematical problems and concepts presented are explained in a simplified, logical, step-by-step manner. New to this edition, illustrations in full color add visual appeal to the text and help you master important concepts. Now in its 6th edition, this book demonstrates the importance of understanding and using math concepts to effectively make money in this demanding business. Part 1 explains how to use a calculator. Part 2 reviews basic math fundamentals. The following parts address math essentials and cost controls in food preparation and math essentials in food service record keeping, while the last part of the book concentrates on managerial math. New topics to this 6th edition include controlling beverage costs; clarifying and explaining the difference between fluid ounces and avoirdupois ounces; and an entire new section on yield testing and how to conduct these tests. There are new methods using helpful memory devices

and acronyms to help you remember procedures and formulas, such as BLT, NO, and the Big Ounce. New strategies and charts are also shown and explained on how to use purchases in order to control food and beverage costs and how transfers affect food and beverage costs. In addition, sections have been added on how to control costs using food (or liquor, or labor) cost percentage guidelines. The content in MATH PRINCIPLES FOR FOOD SERVICE OCCUPATIONS, 6E meets the required knowledge and competencies for business and math skills as required by the American Culinary Federation.

CONTENTS

Forward. Preface. Acknowledgments. Part I: THE CALCULATOR. 1. Using the Calculator. Part II: REVIEW OF BASIC MATH FUNDAMENTALS. 2. Numbers, Symbols of Operations, and the Mill. 3. Addition, Subtraction, Multiplication, and Division. 4. Fractions, Decimals, Ratios, and Percents. Part III: MATH ESSENTIALS AND COST CONTROLS IN FOOD PREPARATION. 5. Weights and Measures. 6. Using the Metric System of Measure. 7. Portion Control. 8. Converting Recipes, Yields, and Baking Formulas. 9. Food, Recipe, and Labor Costing. Part IV: MATH ESSENTIALS IN FOOD SERVICE RECORD KEEPING. 10. Determining Cost Percentages and Pricing the Menu. 11. Inventory Procedures and Controlling Costs. 12. Purchasing and Receiving. 13. Daily Production Reports and Determining Liquor Costs. Part V: ESSENTIALS OF MANAGERIAL MATH. 14. Front of the House and Managerial Mathematical Operations. 15. Personal Taxes, Payroll, and Financial Statements. Appendix A. Glossary. Index.

KITCHEN PRO SERIES: GUIDE TO CHEESE IDENTIFICATION, CLASSIFICATION, AND UTILIZATION

Culinary Institute of America, Culinary Institute of America, Hyde Park, NY; John Fischer

© 2011, 256pp, Hardback, 9781435401174

ebook



Kitchen Pro Series: Guide to Cheeses Identification, Classification, and Utilization is the definitive guide to purchasing and utilizing cheese for professional chefs, foodservice personnel, culinarians, and food enthusiasts. Part of the

CIA's new Kitchen Pro Series focusing on kitchen preparation skills, this user-friendly, full-color resource discusses the basic history of cheese, its manufacture, and its incorporation into different cuisines across the dining spectrum. Product identification, availability, storage, flavor and development are all described in detail in this invaluable introduction to the world of cheese!

CONTENTS

Recipe Contents About the CIA Author Biography Acknowledgements Introduction Chapter 1: Why Cheese? Chapter 2: Fresh and Young Cheeses Chapter 3: Mild Aged Cheeses Chapter 4: Medium Strength and Nutty Cheeses Chapter 5: Strong & Stinky Cheeses Chapter 6: Cooking With Cheese Chapter 7: What's with this Cheese? Glossary Bibliography Appendix A: Reference Tables Appendix B: Resources Index Photo Credits Recipe Contents Croque Monsieur Grilled Halloumi White Wine Vinaigrette Macaroni & Cheese with Bacon Ravioli with Zucchini and Lemon Thyme Midnight Moon Cheese Soufflé Tartiflette Americaine Fondue Gnocchi alla Romana Fonduta Gougères Raclette Warm Mozzarella Appetizer Risotto with Taleggio and Arugula Fromage Fort Flamiche aux Poireaux Pâte Brisée Spiedini alla Romana Roquefort and Walnut Pithivier Goat

Cheese and Pecan Napoleon Homemade Ricotta Herb-Marinated Yogurt Cheese Belgian Endive au Gratin Grilled Trevigiano with Smoked Scamorza Paneer Paratha

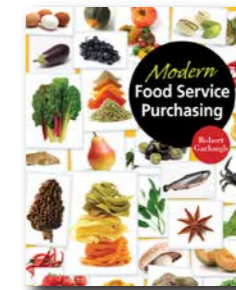
MODERN FOOD SERVICE PURCHASING

Business Essentials to Procurement

Robert B. Garlough, *Secchia Institute for Culinary Education, Grand Rapids Community College, Grand Rapids, Michigan*

© 2011, 864pp, Hardback, 9781418039646

ebook



MODERN FOOD SERVICE PURCHASING is designed specifically to provide culinary arts professionals with current, in-depth coverage of the essential concepts of purchasing, storeroom operations, and financial stewardship. This comprehensive resource

brings together under one cover the four fundamentals of contemporary food service purchasing: Market and distribution systems Storeroom operations Cost controls Product information Delivering a chef-focused overview of financial management and the formulas used to control a successful business, Modern Food Service Purchasing explains in detail how to set up a successful storeroom operation while providing chefs and buyers with a comprehensive reference that will deliver value for years to come. Extensive color photography, useful charts and forms, and a comprehensive glossary of key terms round out the coverage.

CONTENTS

Part I. Procurement: Dynamics of Food Service Purchasing. 1. The Purchasing Function: An Overview. 2. Food Laws and the Market and Distribution Systems. 3. Practical Considerations for Buying Decisions 4. Modern Applications of

Food Science. Part II. Purchasing Management: Mastering the Storeroom. 5. Measuring and Packaging for Preservation, Sale, and Distribution. 6. The Ingredient Process. 7. The Physical Storeroom. 8. Receiving, Storing, and Issuing. 9. Cost Control Measures for Food Service Operations. 10. Security Issues with Vendors, Employees and Customers. Part III. The Commodities: Developing Product Knowledge. 11. Herbs, Spices, Minerals, and Flavoring Agents. 12. Bakery Supplies. 13. Meats and Offal. 14. Poultry and Game. 15. Fish and Shellfish. 16. Fruits. 17. Vegetables. 18. Eggs, Dairy, and Cheese. 19. Vegetarian and Special Dietary Products. 20. Beverages. 21. Postscript: Futurist Thoughts on Food Service Appendix A. Financial and Cost Control Formulas. Appendix B. Standard Measurement Conversions. Appendix C. Approximate Ingredient Volume to Weight Equivalents. Appendix D. Management Checklists. Appendix E. Cost Control Forms. Appendix F. Food Service Industry Resources. Appendix G. State Alcohol Control Boards. Appendix H. Hospitality Professional Organizations. Appendix I. Commodity Organizations.

KITCHEN PRO SERIES

Guide to Meat Identification, Fabrication and Utilization
*Culinary Institute of America, Culinary Institute of America,
 Hyde Park, NY; Thomas Schneller, Culinary Institute of America*

© 2010, 288pp, Hardback, 9781428319943

ebook



Kitchen Pro Series: Guide to Meat Identification, Fabrication, and Utilization is the definitive guide to purchasing and fabricating meat cuts for professional chefs, foodservice personnel, culinarians, and food enthusiasts. Part of the CIA's new Kitchen Pro

Series focusing on kitchen preparation skills, this user-friendly, full-color resource provides practical information on fabricating beef, pork, veal, lamb, game, and exotic meats. Helpful storage information, basic preparation methods for each cut, and recipes are included to give professional and home chefs everything they need to know to produce well-primed cuts of meat. For anyone who believes that butchery is a lost art, The Culinary Institute of America's Chef Thomas Schneller counters that notion by providing a close examination and explanation of the craft in this clear and concise book.

CONTENTS

1: What is Meat? 2: Beef. 3: Veal. 4: Pork. 5: Lamb. 6: Game. 7: Safety and Sanitation. 8: Nutrition. Appendix A: References. Glossary. Index.

KITCHEN PRO SERIES

Guide to Fish and Seafood Identification, Fabrication and Utilization

*Culinary Institute of America, Culinary Institute of America,
 Hyde Park, NY; Mark Ainsworth*

© 2010, 352pp, Hardback, 9781435400368

ebook



Kitchen Pro Series: Guide to Fish and Seafood Identification, Fabrication, and Utilization is the definitive guide to purchasing and fabricating fish and shellfish for professional chefs, foodservice personnel, culinarians, and food

enthusiasts. Part of the CIA's new Kitchen Pro Series focusing on kitchen preparation skills, this invaluable resource features helpful storage information, basic preparation methods, and recipes that will allow professional and home chefs to fabricate well-prepared fish and seafood. Throughout this lavishly illustrated text, The Culinary Institute of America's Chef Mark Ainsworth offers readers a satisfying alternative to meat by educating them about how to purchase and prepare healthy and delicious fish and seafood dishes.

CONTENTS

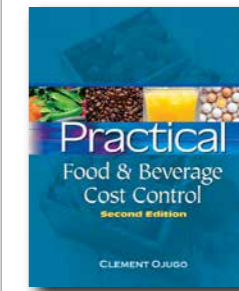
1. Fishing Methods. 2. Fin Fish: Quality Characteristics, Storage and Handling. 3. Shellfish: Quality Characteristics, Storage and Handling. 4. Fin Fish Identification. 5. Shellfish Identification. 6. Cephalopod and Others Identification. 7. Fin Fish Fabrication. 8. Shellfish Fabrication and Tools of the Trade. 9. Aquaculture. 10. Sanitation. Safety and Sanitation, Storage and Handling. 11. Cured, Brined, Smoked, Raw and Caviar. 12. Nutrition and Understanding Cooking Methods and Ingredients. Recipes. Appendix A: References. Appendix B: Conversions. Glossary. Index.

PRACTICAL FOOD AND BEVERAGE COST CONTROL, 2E

Clement Ojugo

© 2010, 488pp, Paperback, 9781428335448

ebook



Regardless of your position in restaurant management, your goals will include cost control, and may at times conflict with the goals of other team members. This book teaches you how to systematically analyze your operations and determine the best course of action.

Practical Food and Beverage Cost Control, 2e is designed to share successful cost management strategies and procedures with anyone who wishes to update or renew their cost control knowledge. Details on how to plan, assess and interpret the many cost control aspects of food and beverage operations are included along with vital financial information to meet the company's profit and expense objectives. While emphasis is placed on the perspective of the "the manager", focus is placed on the importance of the restaurant management team working together toward minimizing expenses and maximizing profit. With practical inclusions and helpful forms, this resource can be put to use today in any foodservice application.

CONTENTS

Chapter 1: Overview of the Industry and the Managers Role Chapter 2: Menu Development Part 1: Purchasing Standards Chapter 3: Introduction to Purchasing Chapter 4: Purchase Specifications Chapter 5: Price and the Vendor Chapter 6: Purchasing Controls Part 2: Beverage Standards Chapter 7: Introduction to Beverages Chapter 8: Beverage Procedures, From Start to Finish Chapter 9: Beverage Controls and Service Procedures Part 3: Cost Control Standards Chapter 10: Planning for Food Profit and Controls Chapter 11: Monthly Physical Inventory and Monthly Food

Cost Calculations Chapter 12: Revenue and Cash Handling Control Chapter 13: Menu Analysis / Planning for Sales Chapter 14: Staff Planning and Labor Cost Control Chapter 15: Analyzing Cost-Volume-Profit (CVP) Relationships and Marginal Contribution Break-even (MCB) Chapter 16: Budgeting and Manager "ROI"

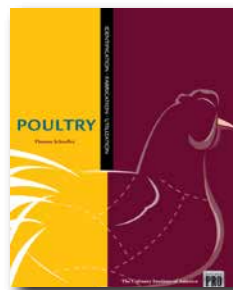
THE KITCHEN PRO SERIES

Guide to Poultry Identification, Fabrication and Utilization

Thomas Schneller, Culinary Institute of America

© 2010, 320pp, Hardback, 9781435400382

ebook



The Kitchen Pro Series: Guide to Poultry Identification, Fabrication and Utilization is the definitive manual on purchasing and fabricating poultry products. Designed for chefs, foodservice managers, purchasing agents, culinary students

and instructors, custom shop operators, and food enthusiasts, Additional features include storage information, basic preparation methods for each type of poultry product, and recipes.

BEVERAGE SERVICES SKILLS

Lee Perlitz, Lee Perlitz Training Consultancy

© 2017, 240pp, Paperback, 9780170376242

ebook



Looking to qualify in hospitality? Beverage Services Skills provides the required volume of learning and a fully rounded skill set. The practical spiral-bound format with tear-out worksheets allows you to learn in classroom and hospitality settings and submit assignments easily. Created

in Australia for these five units of competency: - SITXFSA001 Use hygienic practices for food safety - SITHFAB002 Provide responsible service of alcohol - SITHFAB003 Operate a bar - SITHFAB001 Clean and tidy bar areas - SITHFAB005 Prepare and serve espresso coffee Built to help you sail through your studies and attain your qualification with ease.

CONTENTS

1 - USE HYGIENIC PRACTICES FOR FOOD SAFETY
1.1 Follow hygiene procedures and identify food hazards
1.2 Report any personal health issues
1.3 Prevent food contamination
1.4 Prevent cross contamination by washing hands
2 - Provide Responsible Service of Alcohol
2.1 Sell or serve alcohol responsibly
2.2 Assist customers to drink within appropriate limits
2.3 Assess alcohol affected customers and identify customers to whom sale or service must be refused
2.4 Refuse to provide alcohol
3 - Operate a Bar
3.1 Prepare bar for service
3.2 Take drink orders
3.3 Prepare and serve drinks
3.4 Close down bar operations
3.5 Work safely and reduce negative environmental impacts
4 - Clean and Tidy Bar Areas
4.1 Clean bar and equipment
4.2 Clean and maintain public areas
4.3 Work safely and reduce negative environmental impacts
5 - Prepare and Serve Espresso Coffee
5.1 Organise coffee workstation
5.2 Select and grind coffee beans
5.3 Advise customers on espresso coffee beverages
5.4 Extract and monitor quality of espresso
5.5 Texture milk
5.6 Serve espresso coffee beverages
5.7 Clean espresso equipment

HOSPITALITY SUPERVISION & LEADERSHIP LEVEL 3

David Foskett, London School of Hospitality and Tourism; Patricia Paskins, London School of Hospitality and Tourism

© 2015, 0pp, Paperback, 9781471847523



Prepare for assessment and master the skills and knowledge you need to succeed as a hospitality and catering supervisor with this support resource. Covering all of the latest mandatory and most popular optional units, with a strong focus on preparation for assessment, this will be an

essential resource for anyone working towards the Level 3 NVQ Diploma in Hospitality Supervision and Leadership, whether in college or in the workplace. It also provides support for those completing the Hospitality Supervision and Leadership apprenticeship.

CONTENTS

Chapter 1: Set objectives and provide support for team members
Chapter 2: Develop productive working relationships with colleagues
Chapter 3: Contribute to the control of resources
Chapter 4: Maintain health, hygiene, safety and security in the working environment
Chapter 5: Lead the team to improve customer service
Chapter 6: Supervise functions
Chapter 7: Supervise food service
Chapter 8: Supervise drink services
Chapter 9: Supervise housekeeping operations
Chapter 10: Supervise reception services
Chapter 11: Supervise reservations and booking services
Chapter 12: Contributed to promoting hospitality
Chapter 13: Supervise linen services
Chapter 14: Monitor and solve customer service problems
Chapter 15: Improve the customer relationship
Chapter 16: Support learning and development within own area of responsibility
Chapter 17: Supervise the use of technological equipment in hospitality services
Chapter 18: Supervise practices for handling payments
Chapter 19: Contribute to the selection of staff for activities
Chapter 20: Lead and manage meetings
Chapter 21: Employment rights and responsibilities

HOME COOKING

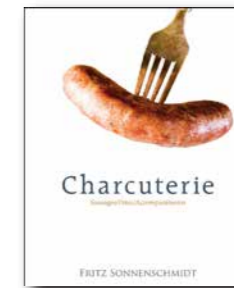
CHARCUTERIE

Sausages, Pates and Accompaniments

Fritz H. Sonnenschmidt

© 2010, 320pp, Paperback, 9781428319912

ebook



CHARCUTERIE: SAUSAGES, PATES AND ACCOMPANIMENTS teaches readers how to prepare sausages, pates and other cooked processed foods. These skills are invaluable to a culinarian, as they constantly come into play while in the kitchen.

This product is a useful guide for someone working in Charcuterie, but may also be used as a reference book for Garde Manger procedures.

CONTENTS

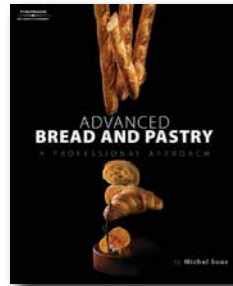
1: Equipment Selection, Sanitary Care, and Usage.
2: Meat, the raw base of Sausage Making.
3: Seasonings, Binders, and Curing Salts.
4: Sausage Casings.
5: Smoking Sausages and Meats.
6: Cooked Sausages.
7: Spreadable Raw Sausages.
8: Sliceable Raw Sausages.
9: Poached Sausages.
10: Bratwurst.
11: Pâtés and Terrines.
12: Aspics, Headcheese, and Savory Jellies.
13: Curing and Brining.
14: Introduction to Salsas.
15: Specialty Recipes.
Appendix A: Conversion Chart.
Appendix B: How to Calculate Sausage Formulas.
Appendix C: Resources.

ADVANCED BREAD AND PASTRY

Michel Suas

© 2009, 1056pp, Hardback, 9781418011697

ebook



Advanced Bread & Pastry has a unique approach to providing advanced level concepts, techniques and formulas to those aspiring to be professional bakers and professional pastry chefs. Exquisite photographs are throughout to further inspire learners

and professionals of the unlimited potential of the craft. Advanced Bread and Pastry provides in depth information and troubleshooting strategies for addressing the complex techniques of the advanced level of bread and pastry arts.

CONTENTS

Chapter 1: The History of Baking and Pastry
Chapter 2: Bakery Equipment and Baking Tools
Chapter 3: Bakers Percentages
Chapter 4: Flour and Milling Process
Chapter 5: Water
Chapter 6: Salt
Chapter 7: Yeast
Chapter 8: Baking Process: Basic Steps and Procedures
Chapter 9: Mixing and Mixing Techniques
Chapter 10: Mixing Log
Chapter 11: Calculating Water Temperature
Chapter 12: Fermentation
Chapter 13: Enzyme Charts, Scoring, and Baking
Chapter 14: Pre-Ferments
Chapter 15: Retarding and Temperature Charts
Chapter 16: Basic Doughs
Chapter 17: Yeast Breads
Chapter 18: Rolls, and Breakfast Breads
Chapter 19: Cookies
Chapter 20: Pies
Chapter 21: Quick Breads: Muffins and Others
Chapter 22: Cakes—Bases
Chapter 23: Cake Decorating
Chapter 24: Pastries and Plating
Chapter 25: Frozen Desserts
Chapter 26: Chocolate
Chapter 27: Sugar and Marzipan

HOSPITALITY

HOSPITALITY MANAGEMENT, 4E

Lynn van der Wagen, Northern Sydney Institute; Lauren White

© 2019, 600pp, Paperback, 9780170411424

ebook



Written for SIT50416 Diploma of Hospitality Management, Hospitality Management, 4e covers all 13 core units plus seven electives. Each chapter is written to a unit of competency and maintains the volume of learning of previous editions, with

relevant and easy-to-understand information including Australian examples and references. Structured in three parts, the text covers the knowledge and skills required of frontline supervisors, managerial topics, and business strategy content. The 'Industry viewpoint' at the start of each chapter introduces students to current issues and themes in the hospitality industry, and numerous pedagogical features, examples and illustrations have been included throughout the text to help students engage with the material and extend their understanding. Each chapter includes activities for discussion and debate, with assessment activities requiring the understanding, application and analysis of case studies. Each section concludes with an integrated case study and weblinks to useful industry resources.

CONTENTS

PART 1. SUPERVISORY 1. Source and use information on the hospitality industry 2. Enhance customer service experiences 3. Monitor work operations 4. Implement and monitor work health safety 5. Manage finances within a budget 6. Lead and manage people
PART 2. MANAGERIAL 7. Develop and manage quality customer service 8. Manage operational plan 9. Prepare and monitor budgets 10. Research and comply with regulatory

requirements 11. Establish and conduct business relationships 12. Roster staff 13. Manage diversity in the workplace 14. Manage conflict and crisis
PART 3. STRATEGIC MANAGEMENT 15. Develop and implement a business plan 16. Develop and implement marketing strategies 17. Manage finances 18. Manage physical assets 19. Recruit, select and induct staff 20. Monitor staff performance 21. Establish and maintain a work health safety system

BEVERAGE SERVICES SKILLS

Lee Perlitz, Lee Perlitz Training Consultancy

© 2017, 240pp, Paperback, 9780170376242

ebook



Looking to qualify in hospitality? Beverage Services Skills provides the required volume of learning and a fully rounded skill set. The practical spiral-bound format with tear-out worksheets allows you to learn in classroom and hospitality settings and submit assignments easily. Created

in Australia for these five units of competency: - SITXFSA001 Use hygienic practices for food safety - SITHFAB002 Provide responsible service of alcohol - SITHFAB003 Operate a bar - SITHFAB001 Clean and tidy bar areas - SITHFAB005 Prepare and serve espresso coffee Built to help you sail through your studies and attain your qualification with ease.

CONTENTS

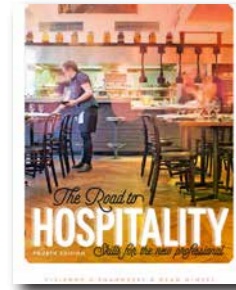
1 - USE HYGIENIC PRACTICES FOR FOOD SAFETY
1.1 Follow hygiene procedures and identify food hazards
1.2 Report any personal health issues
1.3 Prevent food contamination
1.4 Prevent cross contamination by washing hands
2 - Provide Responsible Service of Alcohol
2.1 Sell or serve alcohol responsibly
2.2 Assist customers to drink within appropriate limits
2.3 Assess alcohol affected customers and identify customers to whom sale or service must be refused
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3 - Operate a Bar
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5.5 Texture milk
5.6 Serve espresso coffee beverages
5.7 Clean espresso equipment

THE ROAD TO HOSPITALITY, 4E

Vivienne O'Shannessy; Dean Minett

© 2017, 416pp, Paperback, 9780170364348

ebook



Winner – 2017 Australian Publishers Association EPAA Student Resource, TAFE & Vocational Education The judges said: “Comprehensive coverage of content of core and most popular units with engaging visuals and content that reflects current hospitality design. Relevant and new

employability skills and critical thinking connect students to real-life challenges.” Prepare students to master their skills and knowledge needed to succeed within the hospitality industry with the new edition of The Road to Hospitality: Skills for the New Professional, 4e. Thoroughly revised, The Road to Hospitality: Skills for the New Professional, 4e has been repositioned to cover core and elective units of competency at both Certificate II and III levels. Covering best practices, new techniques and legislations, this new edition uses real world industry examples and follows a clear and logical structure, which builds and strengthens the knowledge and skills of each student. Employability skills are emphasised holistically throughout the full-colour text. The Road to Hospitality: Skills for the New Professional, 4e supports learning and delivery in: • SIT20316 Certificate II in Hospitality • SIT30616 Certificate III in Hospitality Hospitality: Infinite possibilities. Endless opportunities.

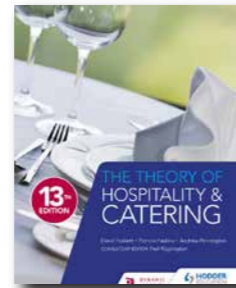
CONTENTS

1 Source and use information on the hospitality industry 2 Interact with customers 3 Provide service to customers 4 Show social and cultural sensitivity 5 Participate in safe work practices 6 Use hygienic practices for hospitality services 7 Use hygienic practices for food safety 8 Work effectively with others 9 Work effectively in hospitality services 10 Coach others in job skills

THE THEORY OF HOSPITALITY AND CATERING, 13E

David Foskett, London School of Hospitality and Tourism; Victor Ceserani

© 2016, 0pp, Paperback, 9781471865237



Offering a complete overview of the hospitality and catering industry for over 50 years, this new edition of the essential reference text has been updated to reflect latest developments and current issues. Covering all aspects of the industry - from

commodities and nutrition, to planning, resourcing and running each of the key operational areas - The Theory of Hospitality and Catering is an essential text for anyone training to work in the hospitality industry. It will be valuable to anyone completing courses in Professional Cookery and Hospitality Supervision, as well as hospitality management and culinary arts students. Supporting learning and training delivery in: • SIT30916 Certificate III in Catering Operations • SIT40616 Certificate IV in Catering Operations

PROFESSIONAL CHEF COMMERCIAL COOKERY, 2E

Jason Ford, Southern Queensland Institute of TAFE; Gary Hunter, Westminster Kingsway College; Terry Tinton, Westminster Kingsway College; Neil Rippington, Colchester Institute

© 2015, 440pp, Paperback, 9780170245548

ebook



All the fresh ingredients you need for a successful career in Commercial Cookery. Now in a brand new 2 book split edition - Professional Chef 2e is available as: Kitchen Operations (Volume 1) covering core units from SIT20312 Certificate II in Kitchen Operations

qualification Commercial Cookery (Volume 2) covering core units from SIT30813 Certificate III in Commercial Cookery qualification Professional Chef 2e is the ultimate guide for aspiring chefs looking to excel in their studies and progress towards a rewarding and stimulating career. It clearly explains the skills, techniques and theory needed to excel in your studies, succeed in the kitchen and compete for some of the finest jobs in the catering industry.

CONTENTS

1. Produce poultry dishes 2. Produce seafood dishes 3. Produce meat dishes 4. Produce breads, cakes and pastries 5. Produce desserts 6. Produce and serve food for buffets 7. Plan and cost menus 8. Produce food that meets special dietary requirements 9. Work effectively as a cook 10. Coach others in job skills 11. Prepare and serve cheese 12. Receive and store stock 13. Source and use information on the hospitality industry

PROFESSIONAL CHEF: KITCHEN OPERATIONS, 2E

Jason Ford, Southern Queensland Institute of TAFE; Gary Hunter, Westminster Kingsway College; Terry Tinton, Westminster Kingsway College; Neil Rippington, Colchester Institute

© 2015, 400pp, Paperback, 9780170245555

ebook



All the fresh ingredients you need for a successful career in Commercial Cookery. Now in a brand new, two-book split edition, Professional Chef 2e is available as Kitchen Operations (Volume 1) covering core units from SIT20312 Certificate II in

Kitchen Operations qualification and as Commercial Cookery (Volume 2) covering core units from SIT30813 Certificate III in Commercial Cookery qualification. Professional Chef 2e is the ultimate guide for aspiring chefs looking to excel in their studies and make progress toward a rewarding and stimulating career. It clearly explains the skills, techniques and theory needed to excel in your studies, succeed in the kitchen and compete for some of the finest jobs in the catering industry.

CONTENTS

1. Work effectively with others 2. Participate in safe work practices 3. Use hygienic practices for food safety 4. Clean kitchen premises and equipment 5. Maintain the quality of perishables 6. Use food-preparation equipment 7. Produce simple dishes using basic methods 8. Use cookery skills effectively 9. Produce salads and appetisers 10. Produce stocks, sauces and soups 11. Produce vegetable, fruit, egg and farinaceous dishes 12. Preparing sandwiches 13. Participate in safe food-handling practices 14. Participate in environmentally sustainable work practices

BASIC COOKERY FOR FOUNDATION LEARNING

Keyth Richardson; David Foskett, London School of Hospitality and Tourism; Patricia Paskins, London School of Hospitality and Tourism; Steve Thorpe

© 2014, Opp, Paperback, 9781471808197



CONTENTS

1: Level One 1 The hospitality industry 1: Level One 2 Customer service in the hospitality industry 1: Level One 3 Serving food and drink 1: Level One 4 Basic food preparation and cooking 2: Level Two 1 Stocks and sauces 2: Level Two 2 Soup recipes 2: Level Two 3 Dressings 2: Level Two 4 Sandwiches 2: Level Two 5 Salads 2: Level Two 6 Egg recipes 2: Level Two 7 Rice and grain recipes 2: Level Two 8 Pasta recipes 2: Level Two 9 Fish recipes 2: Level Two 10 Meat recipes 2: Level Two 11 Poultry recipes 2: Level Two 12 Vegetable recipes 2: Level Two 13 Pastry and bread recipes 2: Level Two 14 Fruit recipes 1: Level One 5 Introduction to healthy eating 1: Level One 6 Introduction to food commodities 1: Level One 7 Using kitchen equipment 1: Level One 8 Safety, hygiene and security 1: Level One 9 Teamwork 1: Level One 10 Food safety

FOOD AND BEVERAGE SERVICE

For Levels 1 & 2

Dennis Lillicrap; John Cousins; Suzanne Weekes

© 2014, Opp, Paperback, 9781471807916



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1: Level One Investigating the catering and hospitality industry 2: Level Two The hospitality industry 2: Level Two Food and beverage operations 1: Level One Underpinning knowledge and skills 2: Level Two Service areas and equipment 2: Level Two Cellar work 2: Level Two Applying personal workplace skills 2: Level Two Legislation in food and beverage service 2: Level Two Health, safety and security 2: Level Two Food safety 2: Level Two Principles of customer service 1: Level One Menu and beverage product knowledge 2: Level Two Menus and menu planning 2: Level Two Menu knowledge 2: Level Two Wine and drink lists 2: Level Two Non-alcoholic beverages (soft drinks) 2: Level Two Hot beverages 2: Level Two Alcoholic beverages 1: Level One Service skills 2: Level Two Essential technical skills 2: Level Two Preparation for service 2: Level Two Taking customer orders 2: Level Two Food service skills 2: Level Two Beverage service skills 2: Level Two Bookings, billings and revenue control 1: Level One Annex: Cocktails and mixed drinks

FOOD AND BEVERAGE SERVICE, 9E

John Cousins; Suzanne Weekes; Dennis Lillicrap

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BASIC COOKERY FOR FOUNDATION LEARNING

Keyth Richardson; David Foskett, London School of Hospitality and Tourism; Patricia Paskins, London School of Hospitality and Tourism; Steve Thorpe

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FOOD AND BEVERAGE SERVICE

For Levels 1 & 2

Dennis Lillicrap; John Cousins; Suzanne Weekes

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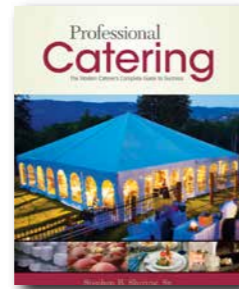
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PROFESSIONAL CATERING

Dr. Stephen B. Shiring, Indiana University of Pennsylvania

© 2014, 416pp, Hardback, 9781133280781

ebook



PROFESSIONAL CATERING equips readers with the knowledge and tools to start and position a competitive catering business. It addresses industry best practices and emerging trends while taking a practical approach to resources that can be

used in implementing business plan. Beautifully illustrated with four-color photography, this easy-to-read text is packed with Tips from the Trade, Ingredients for Success, standard operating procedures, checklists, forms, and hands-on applications designed to develop critical thinking skills. Comprehensive information is provided on each functional catering management task--planning, organizing, influencing, and controlling--helping readers strategically craft a long-term strategy to create a profitable catering operation. It also offers thorough coverage of the business plan, finding and keeping the right client, designing a sustainable operation, resolving conflict, social media, managing risk, understanding legal issues, adhering to FDA and OSHA guidelines, partnering with the event planner to exceed a client's needs, and much more. PROFESSIONAL CATERING is the ideal resource for managing catering profitability.

CONTENTS

PART I: WHAT IS CATERING? 1. The Catering World: Types of Catering. 2. The Caterer and the Client. 3. Establishing the Right Kind of Catering for You. 4. Choosing Your Client. 5. Social Media Marketing. PART II: THE CATERING OPERATION. 6. The Seven Functions of Catering. 7. Planning--The Basic Catering Management Function. 8. Operations--Execution of Tasks. 9. Organizing the Event. 10. Catering Equipment. 11. Procuring Catering Equipment. 12.

Implementing. 13. Controlling. 14. Understanding Risk Management, Insurance and Legal Issues. PART III: GAINING A COMPETITIVE EDGE. 15. Beverage Management. 16. Conflict Resolution. 17. Sustainable Catering: One Ecological Step at a Time. 18. Human Resource Management of Catering. Appendix A: Ingredients for Success. Appendix B: Weights, Measures, and Abbreviations. Appendix C: Sample Business Plan.

KITCHEN PRO SERIES

Guide to Purchasing

Thomas Schneller, Culinary Institute of America; Brad Matthews, The Culinary Institute of America; Culinary Institute of America, Culinary Institute of America, Hyde Park, NY

© 2012, 320pp, Hardback, 9781428319882

ebook



The KITCHEN PRO SERIES: GUIDE TO PURCHASING, 1st edition instructs those in the food industry who would be procuring ingredients and equipment. The text is written to aid the reader in understanding the importance of creating and

maintaining working relationships with product vendors. Since the food industry is full of trends that change frequently, GUIDE TO PURCHASING will help those in the position of buyer to understand the importance of trends and how to make the right decision in ordering ingredients by writing product specifications for food service vendors. This text will not only serve as a reference tool and guide for those in the field but is also written so that the reader will learn a variety of purchasing options and specifications. Critical issues such as the benefits of whether equipment should be leased or purchased, the importance of properly identifying ingredients, securing the proper vendor and then receiving, storing and organizing deliveries are addressed by relating real-life situations so that those facing those issues will have firsthand knowledge on what works

in handling these situations. This text is the sixth in the series and will serve as a link to all the others in the series.

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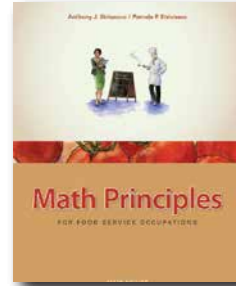
About the CIA. Author Biography. Acknowledgements. Introduction. 1. History of Food Purchasing. 2. Dealing With Purveyors and Establishing a Vendor Relationship. 3. Developing Food Orders. 4. Ordering for Meat, Poultry, and Fish. 5. Inventory Management and the Storeroom. 6. Small and Large Equipment Purchasing. 7. Trends in the Industry. Glossary. Index. Photo Credits. CIA Conversion Charts.

MATH PRINCIPLES FOR FOOD SERVICE OCCUPATIONS, 6E

Anthony J. Strianese, Schenectady County Community College, Schenectady, New York; Pamela P. Strianese, North Colonie Central Schools, Loudonville, New York

© 2012, 384pp, Hardback, 9781435488823

ebook



MATH PRINCIPLES FOR FOOD SERVICE OCCUPATIONS, 6E stresses the direct relevance of math skills in the food service industry while teaching the basic math principles that affect everything from basic recipe preparation to managing

food and labor costs in a restaurant operation. All the mathematical problems and concepts presented are explained in a simplified, logical, step-by-step manner. New to this edition, illustrations in full color add visual appeal to the text and help you master important concepts. Now in its 6th edition, this book demonstrates the importance of understanding and using math concepts to effectively make money in this demanding business. Part 1 explains how to use a calculator. Part 2 reviews basic math fundamentals. The following parts address math essentials and cost controls in food preparation and math essentials in food service record keeping, while the last part of the book concentrates on managerial math. New topics to this 6th edition include controlling beverage costs; clarifying and explaining the difference between fluid ounces and avoirdupois ounces; and an entire new section on yield testing and how to conduct these tests. There are new methods using helpful memory devices and acronyms to help you remember procedures and formulas, such as BLT, NO, and the Big Ounce. New strategies and charts are also shown and explained on how to use purchases in order to control food and beverage costs and how transfers affect food and beverage costs. In addition, sections have been added on how to control costs using food (or liquor, or labor) cost percentage guidelines. The content in MATH PRINCIPLES FOR FOOD

SERVICE OCCUPATIONS, 6E meets the required knowledge and competencies for business and math skills as required by the American Culinary Federation.

CONTENTS

Forward. Preface. Acknowledgments. Part I: THE CALCULATOR. 1. Using the Calculator. Part II: REVIEW OF BASIC MATH FUNDAMENTALS. 2. Numbers, Symbols of Operations, and the Mill. 3. Addition, Subtraction, Multiplication, and Division. 4. Fractions, Decimals, Ratios, and Percents. Part III: MATH ESSENTIALS AND COST CONTROLS IN FOOD PREPARATION. 5. Weights and Measures. 6. Using the Metric System of Measure. 7. Portion Control. 8. Converting Recipes, Yields, and Baking Formulas. 9. Food, Recipe, and Labor Costing. Part IV: MATH ESSENTIALS IN FOOD SERVICE RECORD KEEPING. 10. Determining Cost Percentages and Pricing the Menu. 11. Inventory Procedures and Controlling Costs. 12. Purchasing and Receiving. 13. Daily Production Reports and Determining Liquor Costs. Part V: ESSENTIALS OF MANAGERIAL MATH. 14. Front of the House and Managerial Mathematical Operations. 15. Personal Taxes, Payroll, and Financial Statements. Appendix A. Glossary. Index.

MODERN FOOD SERVICE PURCHASING

Business Essentials to Procurement

Robert B. Garlough, Secchia Institute for Culinary Education, Grand Rapids Community College, Grand Rapids, Michigan

© 2011, 864pp, Hardback, 9781418039646

ebook



MODERN FOOD SERVICE PURCHASING is designed specifically to provide culinary arts professionals with current, in-depth coverage of the essential concepts of purchasing, storeroom operations, and financial stewardship. This comprehensive resource

brings together under one cover the four fundamentals of contemporary food service purchasing: Market and distribution systems Storeroom operations Cost controls Product information Delivering a chef-focused overview of financial management and the formulas used to control a successful business, Modern Food Service Purchasing explains in detail how to set up a successful storeroom operation while providing chefs and buyers with a comprehensive reference that will deliver value for years to come. Extensive color photography, useful charts and forms, and a comprehensive glossary of key terms round out the coverage.

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Customers. Part III. The Commodities: Developing Product Knowledge. 11. Herbs, Spices, Minerals, and Flavoring Agents. 12. Bakery Supplies. 13. Meats and Offal. 14. Poultry and Game. 15. Fish and Shellfish. 16. Fruits. 17. Vegetables. 18. Eggs, Dairy, and Cheese. 19. Vegetarian and Special Dietary Products. 20. Beverages. 21. Postscript: Futurist Thoughts on Food Service Appendix A. Financial and Cost Control Formulas. Appendix B. Standard Measurement Conversions. Appendix C. Approximate Ingredient Volume to Weight Equivalents. Appendix D. Management Checklists. Appendix E. Cost Control Forms. Appendix F. Food Service Industry Resources. Appendix G. State Alcohol Control Boards. Appendix H. Hospitality Professional Organizations. Appendix I. Commodity Organizations.

HOSPITALITY SUPERVISION S/NVQ LEVEL 3

Gary Hunter, Westminster Kingsway College; Terry Tinton, Westminster Kingsway College; Clare Mannall

© 2010, 486pp, Paperback, 9781408009253

ebook



Hospitality Supervision is the must-have guide for anyone wanting to reach the top in the hospitality industry. Covering all the essential theory with a clear focus on industry standards and including dozens of full colour images, Hospitality Supervision will help

learners to succeed in the hospitality industry.

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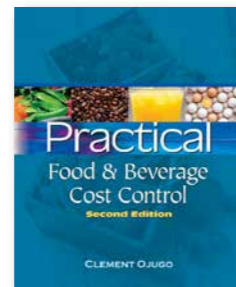
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PRACTICAL FOOD AND BEVERAGE COST CONTROL, 2E

Clement Ojugo

© 2010, 488pp, Paperback, 9781428335448

ebook



Regardless of your position in restaurant management, your goals will include cost control, and may at times conflict with the goals of other team members. This book teaches you how to systematically analyze your operations and determine the best course of action.

Practical Food and Beverage Cost Control, 2e is designed to share successful cost management strategies and procedures with anyone who wishes to update or renew their cost control knowledge. Details on how to plan, assess and interpret the many cost control aspects of food and beverage operations are included along with vital financial information to meet the company's profit and expense objectives. While emphasis is placed on the perspective of the "the manager", focus is placed on the importance of the restaurant management team working together toward minimizing expenses and maximizing profit. With practical inclusions and helpful forms, this resource can be put to use today in any foodservice application.

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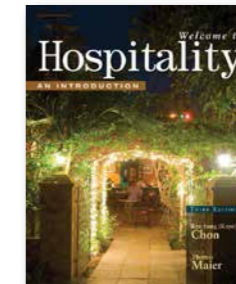
WELCOME TO HOSPITALITY, 3E

An Introduction

Kaye (Kye-Sung) Chon, Ph.D., Ph.D., CHE, Chair, Professor and Director, School of Hotel and Tourism Management, The Hong Kong Polytechnic University; Thomas A. Maier, Ph.D.

© 2010, 560pp, Hardback, 9781428321489

ebook



Welcome to Hospitality: An Introduction provides a detailed description of the many facets of the Hospitality and Tourism sector, including tours and travel, hotels, restaurants, culinary, casino operations, cruises, and the recreation and leisure industries. Personal profiles of

industry leaders highlight the wide range of career opportunities available in the field. The authors discuss the Hospitality and Tourism industry's evolution toward increased internationalization and integration. Industry Insight vignettes offer a behind-the-scenes view of real-life job tasks and career success stories. Each chapter features practical case study scenarios, including business and social attitude comparatives, advertising and marketing messaging, financial modeling, and competitive analysis formulation. New To This Edition: Expanded coverage of industry career opportunities, a comprehensive new chapter on the Gaming Industry, and expanded coverage of Events Management.

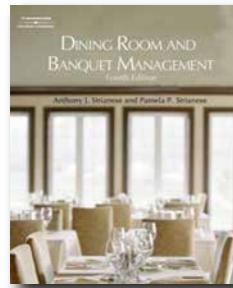
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DINING ROOM AND BANQUET MANAGEMENT, 4E

Anthony J. Strianese, Schenectady County Community College, Schenectady, New York; Pamela P. Strianese, North Colonie Central Schools, Loudonville, New York

© 2008, 416pp, Paperback, 9781418053697



This text is for the introductory course in a hospitality management program that covers dining room and banquet management. Its emphasis is on the service aspects of a business that will distinguish an outstanding dining experience. The text

includes the history of dining room and banquet service, the proper techniques of service, sanitation requirements, and important merchandising concepts. Information about reservations, priority seating, and reservations systems is also included. This new edition is updated with a number of new features. The most noteworthy are the “Chefs’ Choice” professional profiles that spotlight noted individuals in the hospitality industry. These profiles cover the essentials in creating and maintaining a successful dining room and banquet operation. Each chapter also has been updated with key words and terms, more thorough objectives, and numerous discussion questions to help students retain the material. And finally, Dining Room and Banquette Management 5E now offers an electronic instructional support CD-ROM that includes PowerPoints, Computerized Test Bank, Instructor’s Manual and Lesson Plans.

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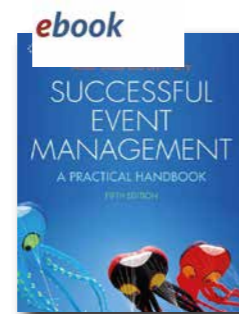
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SUCCESSFUL EVENT MANAGEMENT, 5E

A Practical Handbook

Anton Shone, Colchester Institute; Bryn Parry, Southampton Business School, Southampton Solent University

© 2019, Paperback, 9781473759114



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EVENT MANAGEMENT, 5E

For Tourism, Cultural, Business and Sporting Events

Lynn van der Wagen, Northern Sydney Institute; Lauren White

© 2018, 544pp, Paperback, 9780170394451

ebook



Events Management: For tourism, cultural, business and sporting events 5E helps you learn the skills and knowledge needed to achieve your Diploma of Event Management or undergraduate degree in Event Management and forge a successful career in

this field. The text helps you to build your understanding of tourism, cultural, business and sporting events. Case studies throughout the textbook highlight local and global events to give you examples of best practices for managing events of various scales and geographical contexts. Included revision quizzes enable you to test your understanding of the key topics and to make sure you’re ready for your final exams.

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risk PART SEVEN: EVENT MARKETING 19. Coordinate marketing activities 20. Obtain and manage sponsorship PART EIGHT: EVENT BUDGETS AND FINANCE 21. Interpret financial information 22. Prepare and monitor budgets PART NINE: EVENT WORKFORCE 23. Recruit, select and induct staff 24. Manage volunteers PART TEN: EVENT IMPLEMENTATION 25. Organise event infrastructure

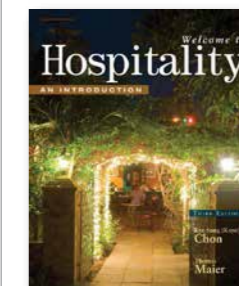
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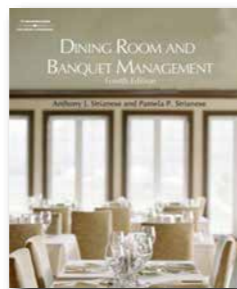
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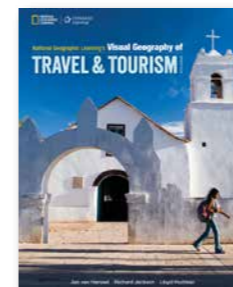
TRAVEL & TOURISM

NATIONAL GEOGRAPHIC LEARNING’S VISUAL GEOGRAPHY OF TRAVEL AND TOURISM, 5E

Jan van Harssel, Niagara University; Richard H. Jackson, Brigham Young University; Lloyd E. Hudman, Brigham Young University

© 2015, 640pp, Paperback, 9781133951261

ebook



Produced in partnership with the National Geographic Society, this remarkable text helps you master the basic tenets of world geography while exploring established and emerging tourist destinations worldwide. The text begins with an overview

of geographic concepts and an introduction to the global tourism industry, including the perspective of both hosts and guests. World destinations are covered in twelve sections divided into short, easy-to-digest chapters, each presenting regional geographic information and physical, cultural, and touristic details specific to individual countries and locations. Each destination features a National Geographic map, descriptive introduction from the National Geographic Atlas of the World, key facts and data, travel and cultural tips, and information on significant tourist destinations and attractions. Each section contains National Geographic articles in the features “Insider Info,” “Through the Visitor’s Eyes,” “City Highlights,” and “Preserving the Future.” In addition to extensive updates, the Fifth Edition now features a vibrant, full-color design.

Ideal for avid travelers and aspiring hospitality, travel, and tourism professionals, NATIONAL GEOGRAPHIC LEARNING’S VISUAL GEOGRAPHY OF TRAVEL AND TOURISM, Fifth Edition, is an engaging and informative guide to the world’s most unusual and appealing destinations.

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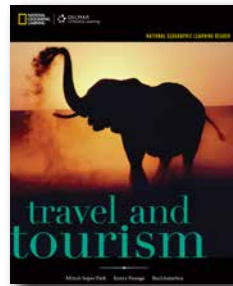
Preface. World Maps. Part I: GEOGRAPHY AND TOURISM. 1. Geography and Tourism: The Attraction of Place. Part II. GEOGRAPHY AND TOURISM OF THE UNITED STATES OF AMERICA. 2. New England. 3. Mid Atlantic. 4. South Atlantic. 5. East South Central. 6. East North Central. 7. West South Central. 8. West North Central. 9. Mountain. 10. Pacific. Part III. GEOGRAPHY AND TOURISM OF CANADA. 11. Canada: Provinces and Territories. Part IV. GEOGRAPHY AND TOURISM IN MEXICO AND CENTRAL AMERICA. 12. Middle America. Part V. GEOGRAPHY AND TOURISM IN THE CARIBBEAN. 13. Greater Antilles. 14. Lesser Antilles. 15. Other Windward Islands. 16. Other Islands of the Caribbean. 17. The Atlantic Islands. Part VI. GEOGRAPHY AND TOURISM IN SOUTH AMERICA. 18. The Andes Countries. 19. Middle-Latitude South America. 20. Brazil and the Guyanas. Part VII. GEOGRAPHY AND TOURISM EUROPE. 21. Western Europe. 22. Northern Europe. 23. Southern Europe. 24. Central Europe and the Balkan States. Part VIII. GEOGRAPHY AND TOURISM IN RUSSIA AND ITS NEIGHBORS. 25. Russia and its Neighbors. 26. The Central Asian Countries Created from the Former Soviet Union. Part IX. GEOGRAPHY AND TOURISM IN THE MIDDLE EAST. 27. The Middle East. 28. The Arabian Peninsula. Part X. GEOGRAPHY AND TOURISM IN AFRICA. 29. North Africa. 30. West Africa. 31. East Africa. 32. Southern Africa. 33. Central and Interior Africa. Part XI. GEOGRAPHY AND TOURISM IN ASIA. 34. East Asia. 35. South Asia. 36. Southeast Asia. 37. Indochina. Part XII. GEOGRAPHY AND TOURISM IN AUSTRALIA, NEW ZEALAND, AND THE ISLANDS OF THE SOUTH PACIFIC. 38. Polynesia. 39. Melanesia, Micronesia and Other Pacific Islands. 40. New Zealand and Australia. Glossary. Bibliography. Index.

NATIONAL GEOGRAPHIC READER: TRAVEL AND TOURISM (WITH EBOOK PRINTED ACCESS CARD)

National Geographic Learning

© 2013, 50pp, Paperback, 9781285084404

ebook



Bring your learning to life with compelling images, media and text from National Geographic. NATIONAL GEOGRAPHIC LEARNING READER: TRAVEL AND TOURISM w/ PAC eBook will help you develop a clearer understanding of the world

around you through engaging content. This reader is designed to be used in combination with several core texts in hospitality, travel and tourism. Used as a supplement with two strong brands of National Geographic and Delmar Learning, this reader will bring relevancy, and first-hand accounts from countries around the world.

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1. Africa's Super Park. 2. Kenya Passage. 3. Bus2Antartica. 4. Geography: The Timeless Continent. 5. Buy, Buy Shanghai. 6. Searching for Shangri-la. 7. Caravanning Kiwiland. 8. A Fragile Empire. 9. Paris Underground. 10. Secrets of the Lakes. 11. Circling Alaska in 176 Days. 12. Landscapes of my Father. 13. The Lost World. 14. The Power of Patagonia.

ELECTRICAL TRADES

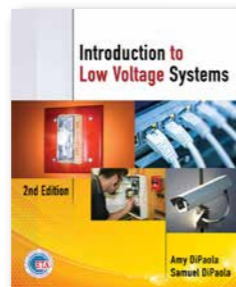
DATA & VOICE COMMUNICATION

INTRODUCTION TO LOW VOLTAGE SYSTEMS, 2E

Sam DiPaola, Minnesota Statewide Limited Energy JATC; Amy DiPaola, Owner and Instructor at the Minnesota Electrical Training Center

© 2013, 448pp, Paperback, 9781111639532

ebook



Inside INTRODUCTION TO LOW VOLTAGE SYSTEMS, 2E you will discover comprehensive coverage of low voltage systems, associated devices, and the methods of the industry. All the basic elements of low voltage systems are combined into a single

source to give a concrete understanding of the operation and integration of individual systems. Plus, this edition walks you through all you need to know about devices, connection and cabling, and the National Electrical Code® in addition to the language and terminology of the industry. And, it's written especially for industry novices so difficult topics can be absorbed swiftly.

CONTENTS

1. Introduction to the National Electrical Code®. 2. Electrical Conductors and Cable. 3. Grounding and Bonding and the 2011 National Electrical Code®, Articles 250, 800, 810, and 820. 4. Audio Physics. 5. Audio Signal-Processing, Amplification, and Reproduction Equipment and National Electrical Code® Article 640. 6. Networking and Information Technology Equipment. 7. Power Supplies, Batteries, and Emergency Systems. 8. Article 725 of the National Electrical Code®; Classification of Circuits. 9. Fire Alarm Systems and National

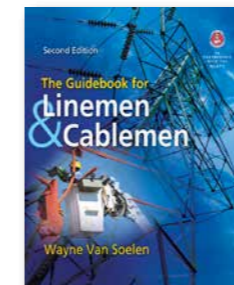
Electrical Code® Article 760. 10. Fiber-Optic Cable and National Electrical Code® Article 770. 11. Telecommunications, and National Electrical Code® Article 800. 12. Security and Card Access System Basics. 13. Wireless Communications and National Electrical Code® Article 810. 14. Close Circuit Television Camera Systems and National Electrical Code® Article 820.

THE GUIDEBOOK FOR LINEMEN AND CABLEMEN, 2E

Wayne Van Soelen

© 2012, 816pp, Hardback, 9781111035013

ebook



The Guidebook for Linemen and Cablemen, 2nd Edition is the much needed solution to a void that has existed for apprentices seeking to become journeymen linemen and anyone training to work on electrical utility circuits. Packaged as a convenient, single-volume

reference guide on the operation of electrical utility systems, this book will give you what other resources won't: practical coverage of the equipment and situations that power line workers are exposed to on a daily basis, with a focus on ensuring concepts are meaningful and applicable. This book also pays special attention to the order in which topics are addressed; simple concepts are explained first, and the book then builds upon these fundamentals to explain more complex theories, thereby setting a strong foundation for clearly understanding key rules and regulations. This text has been updated to include the most current industry information available, including applications of recent technology. This book also contains in-depth exploration of the mechanical aspects of the job, such as working with rigging, trucks, stringing wire, and tree felling. The need for safety and training is highlighted throughout the book, ultimately giving

you a powerful guide for learning the necessary skills to construct, operate, and maintain the lines and cables in an electrical utility system. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

CONTENTS

1. Essentials for powerline workers. 2. Electrical units. 3. Electrical power system overview. 4. Substations. 5. Alternating currents. 6. Three-phase circuits. 7. Awareness in an electrical environment. 8. Constructing overhead powerlines. 9. Constructing underground powerlines. 10. Working with conductors and cables. 11. Operating switch gear. 12. Circuit protection. 13. Installing grounds. 14. Transformers. 15. Supplying quality power. 16. Working with aerial devices. 17. Rigging in powerline work. 18. Working it hot. 19. Outdoor lighting. 20. Revenue metering. 21. Tree work.

DATA, VOICE AND VIDEO CABLING, 3E

Jim Hayes, *The Fiber Optic Association*; Paul Rosenberg, *Iowa State University*

© 2009, 324pp, Paperback, 9781428334724

ebook



Cabling is one of the fastest changing technologies, and Data, Voice and Video Cabling, 3rd Edition, has been updated to address all the latest developments in premises cabling, including technologies and applications in copper, fiber, and wireless cabling. This text is organized

to aid in the understanding of cabling, by following a logical format that covers background information on communications systems and media first, and then delves into more detailed discussions on each media type: copper, wireless, and fiber. Separating the key concepts into specific sections also helps to minimize confusion between the unique installation practices among the different technologies. Within each section, topics progress from the basics to components, installation, and testing to assist in the development of individual skills. This book also provides readers with important background and resources regarding the most recent cabling standards, which are an integral part of this fast-paced industry.

CONTENTS

Part 1. Introduction to Data, Voice, and Video Cabling. 1. The History of Telecommunications. 2. The Technology of Communications. 3. Overview of Wiring Installations. 4. Structured Cabling. Part 2. Copper Wiring. 5. Telephone Wiring. 6. Video System Installations. 7. Network Cabling. 8. Cabling for Wireless Networks. 9. Testing Voice, Data, and Video Wiring. 10. Wiring Termination Practices. Part 3. Fiber Optics. 11. Fiber Optic Cabling Systems. 12. Optical Fiber and Cable. 13. Fiber Optic Connectors and Splices. 14. Fiber Optic Testing. 15. Fiber Optic Installation Practices. Part 4. The Business of Data, Voice, and Video Cabling. 16. Business Issues.

GUIDE TO DIGITAL HOME TECHNOLOGY INTEGRATION

Quentin Wells, *Salt Lake Community College*

© 2009, 672pp, Paperback, 9781435400627

ebook



The most complete, up-to-date resource for home technology integration and home automation available, Residential Integrator's Guide to Digital Home Technology Integration explores how the latest high-tech systems converge to create integrated, whole-

home unified systems. With a focus on installation, troubleshooting, and maintenance, coverage includes LANs, internet connectivity, video and audio systems, telephone systems, security systems, lighting controls, and more. The book first focuses on the basics of each technology segment, what it does, and how its various components work, and then progresses to explain how to connect these components into a unified working system that accomplishes a specific function. This instruction culminates in the ultimate in home technology integration fundamentals: it reveals how all home technologies can be integrated in a single home automation and communication system that provides maximum performance in all areas, while staying within the budget of the average home owner. Designed for the professional installer who wants to obtain DHTI+ certification or do-it-yourself home owners, the book's straightforward writing style and comprehensive approach make this a valuable resource.

CONTENTS

Chapter 1 - Introduction to HTI Chapter 2 - Home Technology Networks - The Basics Chapter 3 - Home Network Design and Configuration Chapter 4 - Home Network Central Components and Low Voltage Wiring Chapter 5 - High Voltage Wiring Chapter 6 - Video and Audio Fundamentals Chapter 7 - Audio/Video Installation and Setup Chapter 8 -

Home Security and Access System Fundamentals Chapter 9 - Security System Installation and Setup Chapter 10 - Telecommunications Fundamentals and Installation Chapter 11 - Home Automation and Control Systems - Lighting; Heating, Ventilation and Air Conditioning (HVAC); Water; and Automated Devices Chapter 12 - Power Supply and Conditioning Chapter 13 - Troubleshooting Integrated Digital Home Technology Systems

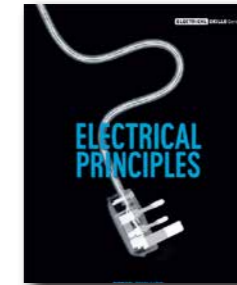
ELECTRICAL

ELECTRICAL PRINCIPLES, 4E

Peter Phillips

© 2019, 688pp, Paperback, 9780170423670

CENGAGE | MINDTAP ebook



Electrical Principles includes more than 800 diagrams and hundreds of examples, as well as practice questions and self-check questions to make the basic principles easier for you to understand. Full-colour illustrations are combined with the text to

help explain important topics. It covers information about the current UEE11 Electrotechnology Training Package and the new AS/NZS 3000:2018 Wiring Rules. Supports learning in: - UEE30811 Certificate III in Electrotechnology Electrician - UEE22011 Certificate II in Electrotechnology (Career Start)

CONTENTS

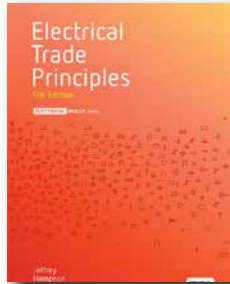
1. The electric circuit 2. Voltage sources and effects of an electric circuit 3. Ohm's law 4. Electrical power 5. Resistance and resistors 6. The series circuit 7. The parallel circuit 8. The series-parallel circuit 9. Basic meters 10. Capacitance 11. Magnetism and electromagnets 12. Electromagnetic induction 13. DC generators 14. DC motors 15. AC fundamentals 16. Pure R, L or C in an AC circuit 17. Series combinations of R, L and C 18. Parallel AC circuits 19. Single-phase power 20. Three-phase power 21. Transformers 22. Three-phase motors 23. Single-phase motors 24. Synchronous machines 25. Test equipment and batteries

ELECTRICAL TRADE PRINCIPLES, 5E

Jeffrey Hampson, Retired; Steven Hanssen, North Sydney Institute TAFE - Meadowbank

© 2019, 656pp, Paperback, 9780170412230

CENGAGE | MINDTAP **ebook**



Electrical Trade Principles gives you the relevant industry knowledge that you need to progress through your course and complete the Capstone Assessment, so you can apply for an electrician's licence. With a focus on student essentials, this text responds to the

changing needs of electrocomms industries and includes more than 1000 illustrations to help you learn the subject material. Updated Trial Exam questions at the end of each chapter help you practice and prepare for the Capstone Assessment and Licensed Electrician's Assessment (LEA). Addresses the units within the UEE30811 Electrotechnology Training Package for Cert II and Cert III, and references the new AS/NZS 3000:2018 Wiring Rules Standard.

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1. Engineering mathematical fundamentals 2. Fundamental electrical principles 3. Direct current circuit principles 4. Electromagnetic principles 5. Alternating current principles – power 1 6. Alternating current principles – power 2 7. Alternating current rotating machines 8. Single- and three-phase transformers 9. Single-phase dc power supplies 10. Environmental and sustainable work practice 11. Telecommunications 12. Deliver a service to customers (MindTap chapter) 13. Maintain documentation (MindTap chapter) 14. Refrigeration fundamentals (MindTap chapter) 15. Prepare refrigerant tubing and fittings (MindTap chapter)

ELECTROTECHNOLOGY PRACTICE, 5E

Jeffrey Hampson, Retired; Steven Hanssen, North Sydney Institute TAFE - Meadowbank

© 2019, 456pp, Paperback, 9780170412223

CENGAGE | MINDTAP **ebook**



Electrotechnology Practice includes more than 1000 illustrations to help you learn various concepts and the real-world aspects of electrical practices. The text has a range of examples and review questions to support your understanding. It covers the two key

qualifications in the UEE Electrotechnology Training Package: - Certificate II in Electrotechnology (Career Start) - Certificate III in Electrotechnology Electrician Electrotechnology Practice prepares you to sit for the Capstone Assessment or the Licenced Electrician's Assessment (LEA), which is a requirement for an Electrician's Licence.

CONTENTS

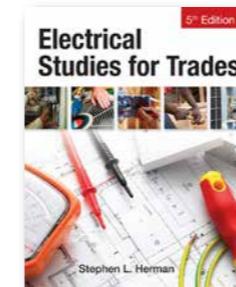
1. Work health and safety 2. Document and apply measures to control WH&S risks associated with electrotechnology work 3. Fabricate, assemble and dismantle utilities industry components 4. Fixing and support devices and techniques 5. Drawings, diagrams and schedules 6. Develop and connect electrical control circuits 7. Wiring system types, applications and terminations 8. Installation of wiring systems 9. Electrical installation – cable selection and coordination 10. Electrical installations – arrangement, control and protection 11. Electrical apparatus and existing circuits – verification and testing 12. Introduction to regulations, compliance standards and codes 13. Electrical heating 14. Lighting 15. Batteries 16. Make up and assemble busbars (MindTap chapter) 17. Verifying installation compliance (MindTap chapter) 18. Electrical winding (MindTap chapter)

ELECTRICAL STUDIES FOR TRADES, 5E

Stephen L. Herman, Lee College (retired)

© 2014, 608pp, Paperback, 9781133278238

ebook



Packed with real-world examples, vivid illustrations, and the latest developments from the field, ELECTRICAL STUDIES FOR TRADES, 5th EDITION is ideal for current and future service technicians in air conditioning and refrigeration, construction, and facilities management—

and anyone else who needs a practical knowledge of electricity. Extremely reader-friendly, the book begins with an overview of basic electricity concepts—rather than complex mathematical calculations. From here, you proceed directly to “must-know” information, including how to determine wire sizes and make a variety of common switch connections. Different types of electrical power panels are also examined in detail. Discussion of general wiring practices and circuit protectors, as well as an introduction to transformers and three-phase and single-phase motors, round out the comprehensive coverage.

CONTENTS

Preface. Unit 1. Atomic Structure. Unit 2. Electrical Quantities, Ohm's Law, and Resistors. Unit 3. Electrical Sources and Static Charges. Unit 4. Magnetism. Unit 5. Series Circuits. Unit 6. Parallel Circuits. Unit 7. Combination Circuits. Unit 8. Measuring Instruments. Unit 9. Alternating Current. Unit 10. Alternating Current Loads. Unit 11. Capacitive Loads. Unit 12. Three-Phase Circuits. Unit 13. Transformers. Unit 14. Three-Phase Transformers. Unit 15. Electrical Services. Unit 16. General Wiring Practices Part 1: Receptacle and Switch Connections. Unit 17. General Wiring Practices Part 2: Protection Circuits, Dimmers, and Chimes. Unit 18. Three-Phase Motors. Unit 19. Single-Phase Motors. Unit 20. Schematics and Wiring Diagrams. Unit 21. Motor Installation.

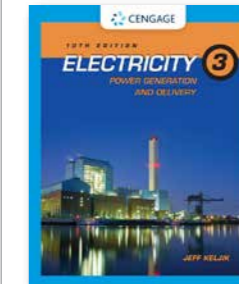
ELECTRICITY 3, 10E

Power Generation and Delivery

Jeffrey J. Keljik, Dunwoody Institute, Minneapolis, MN

© 2014, 280pp, Paperback, 9781111646738

ebook



Updated to the 2011 National Electrical Code®, ELECTRICITY 3: POWER GENERATION AND DELIVERY, 10E explores various types of generators and the delivery of single phase and three-phase power to the customer site. Its thorough coverage of

power generation and delivery includes topics such as DC generators, polyphase circuits, three-phase wye and delta connections, electrical characteristics of three-phase alternators, alternative power sources, transformers, and more. New photos and drawings offer vivid illustrations of text concepts. An excellent resource for both students and practicing electrical workers, ELECTRICITY 3 emphasizes electrical system operation, giving readers a solid understanding of electrical procedures and how to apply them while troubleshooting.

CONTENTS

Preface. 1. Operating Principles of DC Generators. 2. The Separately Excited DC Generator. 3. The Self Excited Shunt Generator. 4. Compound Wound DC Generator. 5. Summary of Units 1-4. 6. Single Phase AC Generation Principles. 7. Introduction to Polyphase Circuits. 8. The Three Phase Wye Connection. 9. The Three Phase Delta Connection. 10. Summary of Units 6-9. 11. Three Phase Alternators. 12. Engine Driven Generating Systems. 13. Control and Paralleling of Three Phase Alternators. 14. Alternate Power Sources. 15. Summary of Units 11-14. 16. Transformer Basics. 17. Single Phase Transformers. 18. The Single Phase, Three Wire Systems. 19. Single Phase Transformers Connected in Delta and Open Delta. 20. Single Phase Transformers Connected in

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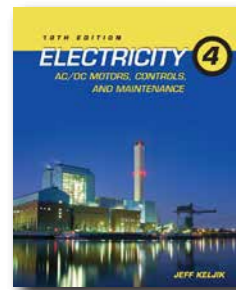
ELECTRICITY 4, 10E

AC/DC Motors, Controls, and Maintenance

Jeffrey J. Keljik, Dunwoody Institute, Minneapolis, MN

© 2014, 372pp, Paperback, 9781111646752

ebook



Updated to the 2011 National Electrical Code®, **ELECTRICITY 4: AC/DC MOTORS, CONTROLS, AND MAINTENANCE, 10e** delivers practical coverage of AC/DC motors, controls, and maintenance. It offers you quick and easy access to current information on DC

motors, AC motors, motor control, electromechanical and solid-state relays and timers, synchronous motors, installation, sensyn units, motor maintenance, and more. The text combines thorough explanations of how systems work with relevant, hands-on examples of electrical system operation to help you develop troubleshooting skills. National Electrical Code®

CONTENTS

1. The DC Shunt Motor. 2. The DC Series Motor. 3. DC Compound Motors. 4. Summary of Units 1-3. 5. Starting and Operating DC Motors. 6. Electronic DC Motor Control. 7. DC Variable Speed Control. 8. DC Motor Dynamic Braking. 9. Basic Principles of Automatic Motor Control. 10. Relays and Timers. 11. Summary of Units 5-10. 12. Three Phase AC Induction Motors. 13. Starting Three Phase Induction Motors. 14. Controllers for Three Phase Motors. 15.

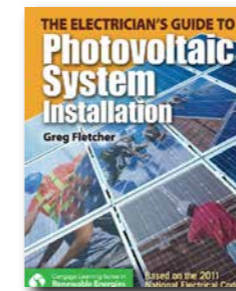
Solid State Starters and Controls. 16. Wound Rotor Induction Motor. 17. The Synchronous Motor. 18. Summary of Units 12-17. 19. Single Phase AC Motors. 20. Special Motor Application. 21. Universal, Series and Repulsion Motors. 22. Energy Efficiency and Motors. 23. Three Phase Motor Installations and the NEC. 24. Single Phase and DC Motor Installation and the NEC. 25. Motor Maintenance. 26. Summary of Units 19-25. Glossary. Index.

THE GUIDE TO PHOTOVOLTAIC SYSTEM INSTALLATION

Gregory W. Fletcher, Kennebec Valley Community College

© 2014, 352pp, Paperback, 9781111639969

CENGAGE | MINDTAP ebook



Written with the installing electrician in mind, **THE GUIDE TO PHOTOVOLTAIC SYSTEM INSTALLATION** provides you with a simple, straightforward approach to understanding photovoltaic system installation in both residential and light

commercial buildings. Filled with illustrations, examples, and multiple opportunities for practice, this comprehensive book includes the most up-to-date information on photovoltaic installation available on the market today. In addition, coverage of topics such as the National Electrical Code® requirements for a photovoltaic system installation ensures that you will be well prepared for the North American Board of Certified Energy Practitioners' (NABCEP) entry level photovoltaic installer certification exam.

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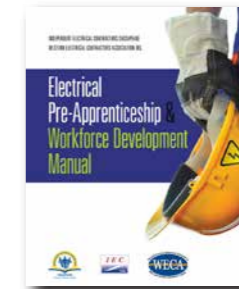
1. Introduction to Photovoltaics. 2. PV System Installation Safety. 3. Understanding Electricity Basics. 4. Solar Fundamentals. 5. PV Modules. 6. Batteries. 7. Charge Controllers. 8. Inverters. 9. PV System Wiring and the NEC. 10. Sizing PV Systems. 11. Installing PV Systems. 12. Maintaining and Troubleshooting a PV System. Appendices.

ELECTRICAL PRE-APPRENTICESHIP AND WORKFORCE DEVELOPMENT MANUAL

IEC Chesapeake; Weca

© 2013, 400pp, Hardback, 9781111316891

ebook



An introduction to the electrical trades, the **ELECTRICAL PRE-APPRENTICESHIP & WORKFORCE DEVELOPMENT MANUAL** primes you for success in an apprenticeship program or for a career as an electrician. This all-inclusive

manual focuses not only on basic electrical training but also includes the critical math, reading, safety, and soft skills necessary for success in the workplace. By demonstrating the skills in the learning objectives, you will gain additional marketable skills for employment. A critical first resource for anyone considering a career in the electrical trades, the **ELECTRICAL PRE-APPRENTICESHIP & WORKFORCE DEVELOPMENT MANUAL** supports your learning with interactive assignments, experience-building labs, and helpful life skills tips.

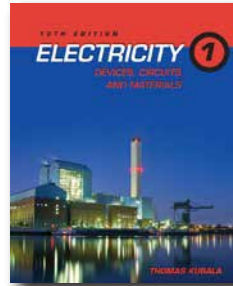
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1. A Career in the Electrical Trades. 2. Professional Behavior and Study Skills. 3. Safety. 4. Math and the Metric System. 5. Basic Concepts of Electricity and Magnetism. 6. Electrical Theory. 7. Introduction to the NEC. 8. Grounding. 9. Electrical Tools. 10. Wiring Overview. 11. Wiring Devices. 12. Wiring Methods. 13. Wiring Calculations. 14. Residential Wiring Requirements. 15. Green Technology. 16. The Job Search.

ELECTRICITY 1, 10E
Devices, Circuits, and Materials
Thomas Kubala

© 2013, 192pp, Paperback, 9781111646691

ebook



Designed to help you learn fundamental electrical concepts and explore their practical applications, this trusted text provides a solid foundation in electron theory and movement, direct-current series circuits, parallel circuits, series-parallel circuits, voltage line

drops, rotating machinery fundamentals, and more. **ELECTRICITY 1: DEVICES, CIRCUITS AND MATERIALS**, Tenth Edition, maintains the user-friendly style and proven instructional approach that are so effective, all while incorporating new material and updates based on the 2011 National Electrical Code®. Featuring current industry terminology, photographs of commonly used electrical equipment, and sample problems with solutions, this convenient, affordable text is an ideal choice for anyone interested in mastering basic electricity, house wiring, or commercial installations.

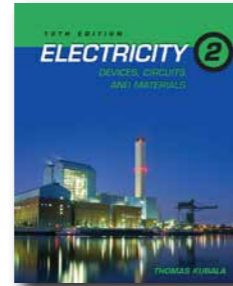
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14. Direct-Current Motor Principles.
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17. Switch Control of Lighting Circuits.
18. Wiring Materials.
19. Remote Control Systems for Lighting Circuits.
20. Summary Review of Units 16-19.

ELECTRICITY 2, 10E
Devices, Circuits and Materials
Thomas Kubala

© 2013, 168pp, Paperback, 9781111646714

ebook



Designed to help you learn fundamental electrical concepts and explore their practical applications, this trusted text provides a thorough introduction to various types of alternating current (AC) circuits, as well as key principles such as power, power factor, power factor correction, inductive reactance,

capacitive reactance, and impedance. **ELECTRICITY 2: DEVICES, CIRCUITS AND MATERIALS**, Tenth Edition, maintains the user-friendly style and proven instructional approach while incorporating new material and updates based on the 2011 National Electrical Code®. Featuring current industry terminology, photographs of commonly used electrical equipment, and sample problems with solutions, this convenient, affordable text is an ideal choice for anyone interested in mastering basic electricity, including AC power, wiring installation, lighting, and effective troubleshooting.

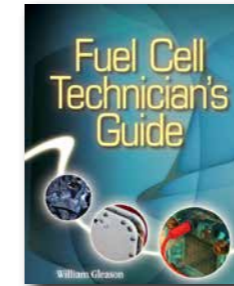
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3. Capacitance and Capacitive Reactance.
4. Series Circuit: Resistance and Inductance.
5. Series Circuit: Resistance and Capacitance.
6. Series Circuit: Resistance, Inductance and Capacitance.
7. AC Parallel Circuits Containing Inductance.
8. AC Parallel Circuits Containing Inductance and Capacitance.
9. AC Power, Power Factor, and Power Factor Correction.
10. Summary Review of Units 1-9.
11. Installation of a Single-Phase, Three-Wire Service Entrance for a Single-Family Residence.
12. Installation of a Single-Phase, Three-Wire Service Entrance for an Apartment Building.
13. Installation of a Three-Phase, Three-Wire Service Entrance.
14. Introduction to Fluorescent Lighting.
15. Installation of Fluorescent Lighting.
16. Summary Review of Units 11-15.

FUEL CELL TECHNICIAN'S GUIDE
William Gleason, Montana Tech, University of Montana

© 2013, 256pp, Paperback, 97811111318208

ebook



THE FUEL CELL TECHNICIAN'S GUIDE explains fuel cells and systems without requiring advanced knowledge in science or engineering for the installation, implementation, hand troubleshooting, and repair of fuel cells and systems.

This book begins with the history of fuel cells and goes on to discuss various kinds of fuel cells, system balance-of-plant issues, safety, and codes and standards that you would encounter on a real job site. Varying fuel cells are used as primary examples throughout the text, providing several different views of how fuel cells work, where they work best, and why these concepts are important.

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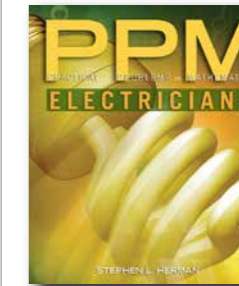
1. History of Fuel Cells.
2. What is a Fuel Cell?
3. Fuel Cell and Hydrogen Safety.
4. Types of Fuel Cells, Chemical Reactions, Classifications and Characteristics & Applications.
5. Fuel Cell Basic System Components.
6. Fuel Cell Sub-Systems.
7. Fuel Cell Systems.
8. Stationary Fuel Cell Applications.
9. Transportation and Material Handling Fuel Cells.
10. Fuel Cell Systems Process and Instrumentation P&I Diagrams.
11. Fuel Cell Systems Power and Control Schematics.
12. Distributed Generation.
13. Combined Heat and Power CHP.
14. Overall Design, Installation, Maintenance and Troubleshooting & Repair.

PRACTICAL PROBLEMS IN MATHEMATICS FOR ELECTRICIANS, 9E

Stephen L. Herman, Lee College (retired)

© 2012, 208pp, Paperback, 97811111313470

ebook



PRACTICAL PROBLEMS IN MATHEMATICS FOR ELECTRICIANS, 9E will give you the math skills you need to succeed in the electrical trade. It introduces you to the important math principles through problems designed for the electrical profession and offers you

an excellent opportunity to develop and practice problem-solving skills while at the same time providing a valuable review of electrical terminology. This new edition uses the same straightforward writing style and simple, step-by-step explanations that made previous editions so reader-friendly. It minimizes theory and emphasizes problem-solving techniques and practice problems. This new edition also includes updated illustrations and information for a better learning experience than ever before! The book begins with basic arithmetic and then, once these basic topics have been mastered, progresses to algebra and concludes with trigonometry. Practical problems with real-world scenarios from the electrical field are used throughout, allowing you to apply key mathematical concepts while developing an awareness of basic electrical terms and practices. This is the perfect resource for students entering the electrical industry, or those simply looking to brush up on the necessary math.

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1. Addition of Whole Numbers.
2. Subtraction of Whole Numbers.
3. Multiplication of Whole Numbers.
4. Division of Whole Numbers.
5. Combined Operations with Whole Numbers.
6. Addition of Common Fractions.
7. Subtraction of

Common Fractions. 8. Multiplication of Common Fractions. 9. Division of Common Fractions. 10. Combined Operations with Common Fractions. 11. Addition of Decimal Fractions. 12. Subtractions of Decimal Fractions. 13. Multiplications of Decimal Fractions. 14. Division of Decimal Fractions. 15. Decimal and Common Fraction Equivalents. 16. Combined Operations with Decimal Fractions. 17. Percent and Percentage 18. Interest 19. Discount. 20. Averages and Estimates. 21. Combined Problems on Percents, Averages, and Estimates. 22. Power. 23. Roots. 24. Combined Operations with Powers and Roots. 25. Metric Measure and Scientific Notation. 26. Length Measure. 27. Area Measure. 28. Volume and Mass Measure. 29. Energy and Temperature Measure. 30. Combined Problems on Measure. 31. Ratio. 32. Proportion. 33. Combined Operations with Ratio And Proportion. 34. Representations in Formulas. 35. Rearrangement in Formulas. 36. General Simple Formulas. 37. Ohms Law Formulas. 38. Power Formulas. 39. Combined Problems on Formulas. 40. Right Triangles. 41. Trigonometric Functions. 42. Plane Vectors 43. Rotating Vectors. 44. Combined Problems in Trigonometry. 45. Number Systems.

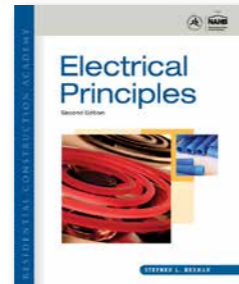
RESIDENTIAL CONSTRUCTION ACADEMY, 2E

Electrical Principles

Stephen L. Herman, Lee College (retired)

© 2012, 320pp, Hardback, 9781111306472

ebook



Through the use of a lively writing style and frequent examples, RESIDENTIAL CONSTRUCTION ACADEMY: ELECTRICAL PRINCIPLES, 2E covers the important topics that you need to know to become a residential electrician. The author, Stephen L. Herman,

logically presents the basic electrical principles from safety to motors and discusses how to go from theory to application. This text helps you learn the work skills, functions and activities included in the Residential Electrician Skill Standards developed by industry leaders for the National Association of Home Builders (NAHB). With its supplemental multimedia this text provides an integrated teaching solution directly linking your education/training program to the residential construction industry.

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SECTION I: Basic Electricity. 1. Safety. 2. Basic Electrical Theory. 3. Electrical Quantities and Ohm's Law. 4. Resistor. 5. Series Circuits. 6. Parallel Circuits. 7. Combination Circuits. 8. Measuring Instruments. 9. Using Wire Tables and Determining Conductor Sizes. 10. Magnetic Induction. SECTION II: Alternating Current. 11. Alternating Current. 12. Inductance in Alternating Current Circuits. 13. Resistive-Inductive Series Circuits. 14. Resistive-Inductive Parallel Circuits. 15. Capacitors. 16. Single-Phase Transformers. 17. Single-Phase Motors.

ELECTRICAL TRADE PRACTICES, 2E

Ralph Berry, University of Ottawa and University of Manitoba; Frank Cahill; Phillip Chadwick, Miller College of TAFE

© 2019, 760pp, Paperback, 9780170397957

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Updated to match the standards of the new edition of Electrical Installations (Wiring Rules) AS/NZS 3000:2018, and written to the core practical units of competency from the UEE11 Electrotechnology Training Package, Electrical Trade Practices, 2e by

Berry, Cahill and Chadwick follows the practical units of competency of the UEE30811 Certificate III in the Electrotechnology Electrician qualification. Designed as a companion text for pre-apprenticeship and apprentice electricians, Electrical Trade Practices is the practical volume to accompany Phillips, Electrical Principles.

CONTENTS

1. Work health and safety principles 2. Environmentally sustainable procedures 3. Document and apply measures to control WH&S risks 4. Fixing and support devices/techniques 5. Hand and power tools and their application 6. Drawings, diagrams and schedules 7. Electrical control devices and circuits 8. Introduction to regulations, compliance standards and codes 9. Wiring systems types, application and terminations 10. Electrical apparatus and circuits 11. Electrical installations – arrangement, control and protection 12. Electrical installations - cable selection and coordination 13. Installation of wiring systems 14. Electrical installations - verification and testing 15. Faults of electrical circuits and equipment, and fault-finding techniques

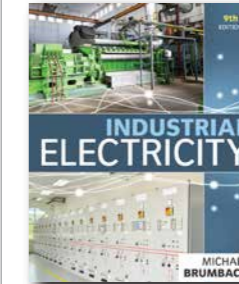
ELECTRICAL THEORY

INDUSTRIAL ELECTRICITY, 9E

Michael E. Brumbach, York Technical College, Rock Hill, South Carolina

© 2017, 688pp, Hardback, 9781285863986

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INDUSTRIAL ELECTRICITY, Ninth Edition, presents the essentials of electrical theory in a clear, current, logical manner to help you master both fundamental concepts and more advanced subjects relevant to the field of industrial electricity. Coverage begins with foundational topics like

electrical symbols and drawings, current, voltage, resistance, and power, while subsequent chapters introduce Ohm's Law; series, parallel, and combination circuits; and resistive and reactive circuits. The text also includes thorough discussion of advanced subjects such as rotating machinery, motor controls, transformers, electronic drives, and PLCs, as well as practical information on key real-world applications of electrical theory, including installation, maintenance, and troubleshooting. The Ninth Edition features more than 800 illustrations and photos to help explain key concepts and bring theory and practice alike to life.

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1. Language of Electricity. 2. Electrical Fundamentals. 3. Electrical Power and Energy. 4. Test Equipment. 5. Basic Resistive Electrical Circuits. 6. Magnets and Magnetism. 7. Alternating Current. 8. AC Circuits. 9. Conductor Types and Sizes. 10. Wiring Methods. 11. Wiring Applications. 12. Transformers. 13. Electrical Distribution. 14. Lighting. 15. Electric Heat. 16. DC Generators. 17. DC Motors. 18. AC Generators (Alternators). 19. AC Motors. 20. Motor Control Devices and Circuits. 21. Basic Industrial Electronics. 22. DC Electronic Variable Speed Drives. 23. AC (Inverter) Drives. 24. Programmable Logic Controllers. Appendix A. Appendix B. Appendix C. Glossary. Index.

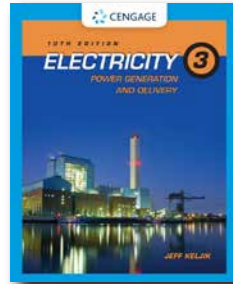
ELECTRICITY 3, 10E

Power Generation and Delivery

Jeffrey J. Keljik, Dunwoody Institute, Minneapolis, MN

© 2014, 280pp, Paperback, 9781111646738

ebook



Updated to the 2011 National Electrical Code®, **ELECTRICITY 3: POWER GENERATION AND DELIVERY, 10E** explores various types of generators and the delivery of single phase and three-phase power to the customer site. Its thorough coverage of

power generation and delivery includes topics such as DC generators, polyphase circuits, three-phase wye and delta connections, electrical characteristics of three-phase alternators, alternative power sources, transformers, and more. New photos and drawings offer vivid illustrations of text concepts. An excellent resource for both students and practicing electrical workers, **ELECTRICITY 3** emphasizes electrical system operation, giving readers a solid understanding of electrical procedures and how to apply them while troubleshooting.

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Preface. 1. Operating Principles of DC Generators. 2. The Separately Excited DC Generator. 3. The Self Excited Shunt Generator. 4. Compound Wound DC Generator. 5. Summary of Units 1-4. 6. Single Phase AC Generation Principles. 7. Introduction to Polyphase Circuits. 8. The Three Phase Wye Connection. 9. The Three Phase Delta Connection. 10. Summary of Units 6-9. 11. Three Phase Alternators. 12. Engine Driven Generating Systems. 13. Control and Paralleling of Three Phase Alternators. 14. Alternate Power Sources. 15. Summary of Units 11-14. 16. Transformer Basics. 17. Single Phase Transformers. 18. The Single Phase, Three Wire Systems. 19. Single Phase Transformers Connected in Delta and Open Delta. 20. Single Phase Transformers Connected in Wye Systems. 21. Three Phase Transformers.

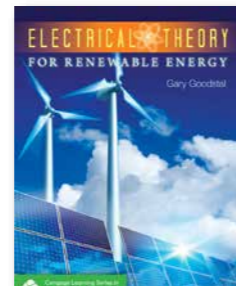
22. Separately Derived Systems With Transformers. 23. Summary of Power Transformers Units 16-22. 22. Instrument Transformers. 25. Power Relay and Monitoring. 26. Transformer Installations and National Electrical Code®. 27 Safety. Glossary. Index.

ELECTRICAL THEORY FOR RENEWABLE ENERGY

Gary Goodstal

© 2013, 352pp, Paperback, 9781133127550

ebook



Essential for anyone interested in a career in renewable energy, **ELECTRICAL THEORY FOR RENEWABLE ENERGY** presents a solid foundation of electrical theory and applications for both photovoltaic (PV) power and wind power in

one engaging text. Designed to apply to electricians as well as individuals specializing in PV and wind turbines, each chapter provides a common technical language and knowledge base for all renewable energy practitioners so that all members of the team (i.e., practitioners, designers, installers, and engineers) are able to work together effectively in the field. With multiple examples and opportunities for practice, this text covers the basic electrical theory that is required for you to understand any renewable energy source that generates electricity.

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1. Atomic Theory. 2. Resistors, Capacitors and Inductors. 3. Electrical Measurement and Ohm's Law. 4. Series DC Circuit Calculations. 5. Parallel DC Circuit Calculations. 6. AC Power. 7. AC Circuit Calculations. 8. Batteries. 9. PV Cells and Arrays. 10. Wind Turbines and Electric Power Generation.

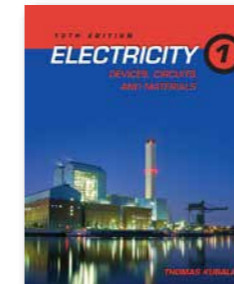
ELECTRICITY 1, 10E

Devices, Circuits, and Materials

Thomas Kubala

© 2013, 192pp, Paperback, 9781111646691

ebook



Designed to help you learn fundamental electrical concepts and explore their practical applications, this trusted text provides a solid foundation in electron theory and movement, direct-current series circuits, parallel circuits, series-parallel circuits, voltage line

drops, rotating machinery fundamentals, and more. **ELECTRICITY 1: DEVICES, CIRCUITS AND MATERIALS, Tenth Edition**, maintains the user-friendly style and proven instructional approach that are so effective, all while incorporating new material and updates based on the 2011 National Electrical Code®. Featuring current industry terminology, photographs of commonly used electrical equipment, and sample problems with solutions, this convenient, affordable text is an ideal choice for anyone interested in mastering basic electricity, house wiring, or commercial installations.

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1. Introduction. 2. Electron Theory and Ohm's Law. 3. Series Circuits. 4. Parallel Circuits. 5. Series-Parallel Circuits. 6. Electrical Energy and Power. 7. Batteries. 8. Electrical Conductors and Wire Sizes. 9. Voltage Drop Across Conductors. 10. Summary Review of Units 1-9. 11. Magnets and Magnetic Fields. 12. Electromagnetism. 13. Generation of Electromotive Force. 14. Direct-Current Motor Principles. 15. Summary Review of Units 11-14. 16. Typical Bell Circuits. 17. Switch Control of Lighting Circuits. 18. Wiring Materials. 19. Remote Control Systems for Lighting Circuits. 20. Summary Review of Units 16-19.

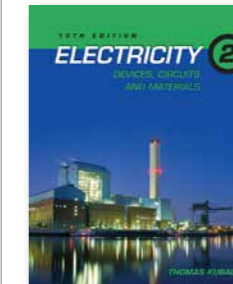
ELECTRICITY 2, 10E

Devices, Circuits and Materials

Thomas Kubala

© 2013, 168pp, Paperback, 9781111646714

ebook



Designed to help you learn fundamental electrical concepts and explore their practical applications, this trusted text provides a thorough introduction to various types of alternating current (AC) circuits, as well as key principles such as power, power factor, power factor correction, inductive reactance,

capacitive reactance, and impedance. **ELECTRICITY 2: DEVICES, CIRCUITS AND MATERIALS, Tenth Edition**, maintains the user-friendly style and proven instructional approach while incorporating new material and updates based on the 2011 National Electrical Code®. Featuring current industry terminology, photographs of commonly used electrical equipment, and sample problems with solutions, this convenient, affordable text is an ideal choice for anyone interested in mastering basic electricity, including AC power, wiring installation, lighting, and effective troubleshooting.

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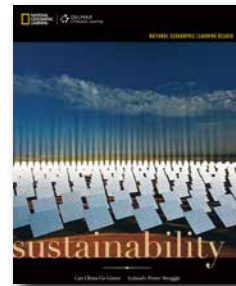
1. Alternating-Current Principles. 2. Inductance and Inductive Reactance. 3. Capacitance and Capacitive Reactance. 4. Series Circuit: Resistance and Inductance. 5. Series Circuit: Resistance and Capacitance. 6. Series Circuit: Resistance, Inductance and Capacitance. 7. AC Parallel Circuits Containing Inductance. 8. AC Parallel Circuits Containing Inductance and Capacitance. 9. AC Power, Power Factor, and Power Factor Correction. 10. Summary Review of Units 1-9. 11. Installation of a Single-Phase, Three-Wire Service Entrance for a Single-Family Residence. 12. Installation of a Single-Phase, Three-Wire Service Entrance for an Apartment Building. 13. Installation of a Three-Phase, Three-Wire Service Entrance. 14. Introduction to Fluorescent Lighting. 15. Installation of Fluorescent Lighting. 16. Summary Review of Units 11-15.

NATIONAL GEOGRAPHIC READER: SUSTAINABILITY (WITH PRINTED ACCESS CARD)

National Geographic Learning

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Can China Go Green. Iceland's Power Struggle. Plugging into the Sun. Can Solar Save Us. The 21st Century Grid. Future Power. The Big Idea: Get the Salt Out. High Marks for Clean Water. The Deep Dilemma. Next: Space Elevator. Environment: London's Green Giant. Up on the Roof.

ALTERNATING CURRENT FUNDAMENTALS, 8E

Stephen L. Herman, Lee College (retired)

© 2012, 768pp, Paperback, 9781111125271

ebook



ALTERNATING CURRENT FUNDAMENTALS, 8E, an industrial standard for over thirty years, has been updated to provide you with the most current information available on the essentials of alternating current. The topics in this book are arranged to build your

knowledge, progressing from basic principles such as the differences between peak, rms, and average values to more complex coverage of circuits containing resistance, inductance, and capacitance. This edition of ALTERNATING CURRENT FUNDAMENTALS, 8E includes additional information on diodes and rectifiers and contains improved graphics that will assist you in understanding state-of-the-art concepts.

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1. An Introduction to Alternating Current.
2. Alternating Current Circuits Containing Resistance.
3. Inductance in Alternating Current Circuits.
4. Series Circuits - Resistance and Impedance.
5. Capacitors and RC Time Constants.
6. Capacitors in Alternating Current Circuits.
7. Series Circuits: Resistance, Inductive Reactance and Capacitive Reactance.
8. AC Parallel Circuits.
9. Series-Parallel Circuits.
10. Three-Phase Systems.
11. AC Instruments and Meters.
12. Alternating Current Generators.
13. Transformers.
14. Transformer Connections for Three-Phase Circuits.
15. Special Transformer Applications.
16. Three-Phase Induction Motors.
17. Three-Phase Synchronous Motors.
18. Single-Phase Motors.
19. Control Circuits.

DIRECT CURRENT FUNDAMENTALS, 8E

Stephen L. Herman, Lee College (retired)

© 2012, 512pp, Paperback, 9781111127466

ebook



For nearly half a century, this widely acclaimed text has presented the fundamental concepts of direct current electricity and magnetism in a straightforward, practical manner. This reader-friendly guide to DC electrical theory and

applications is both thorough and focused, providing detailed coverage in a convenient, affordable volume. The new Eighth Edition retains the distinguishing features that are the cornerstone of this trusted text, including logically organized content that progresses step-by-step from basic principles to advanced concepts. Enhancements for the new edition include updated photographs and illustrations to help you grasp essential concepts quickly and apply your knowledge with confidence, as well as special icons highlighting "green" tips on energy efficiency.

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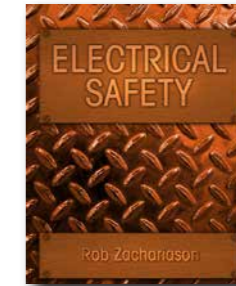
1. An Introduction to Electricity and Electronics.
2. Electricity Production and Use.
3. Electrostatics.
4. Basic Circuit Concepts.
5. Scientific Notation and Metric Prefixes.
6. Electrical Quantity Measurement.
7. Resistance.
8. Ohms Law.
9. Electrical Power and Energy.
10. Series Circuits.
11. Parallel Circuits.
12. Series-Parallel Circuits and Loaded Voltage Dividers.
13. Conduction in Liquid and Gases.
14. Batteries.
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16. Applications of Electromagnetism.
17. Electrical Measuring Instruments.
18. Electromagnetic Induction.
19. DC Generators.
20. Mechanical Motion from Electrical Energy.
21. DC Motors.
22. Starters and Speed Controllers.
23. Solid State Control of Direct Current Motors.
24. Solving DC Networks.

ELECTRICAL SAFETY

Rob Zacharason, Minnesota State Community and Technical College

© 2012, 288pp, Paperback, 9781435481855

ebook



Can your understanding of electrical safety ever be too thorough? ELECTRICAL SAFETY utilizes photographs, line art, and easy to follow language to stress the importance of safety when working around electricity. The text is written through the eyes of an

electrical worker to give accurate scenarios of potential hazards such as electric shock and arcing incidents. Details on personal safety, hazardous working conditions and safety organizations such as OSHA and NFPA 70E make this book the perfect choice for beginner electricians.

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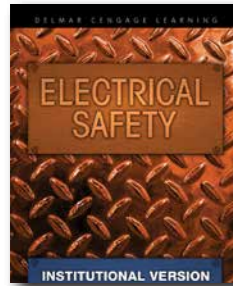
1. Safety Overview. Construction Awareness. Construction Hazards. Cuts. Jewelry. Horseplay. Alcohol and Drugs
2. Safety Organizations, Standards and Certifications Occupational Safety and Health Administration (OSHA). NFPA 70E (Standard for Electrical Safety in the Workplace). National Institute for Occupational Safety and Health (NIOSH). First Aid-CPR-AED
3. Electrical Shock. Electricity and the Human Body. Witnessing a Shock. How to work safely around electricity. Ground Fault Circuit Interrupter (GFCI).
4. Arcing Incident. Arcing Incident. Arc Flash. Arc Blast. Causes of an Arcing incident. Arcing Incident Protection
5. Working on energized equipment. When is it permitted to work on energized equipment? Approach boundaries. Working on energized equipment. Awareness. Personal Protective Equipment. Arcing Flash/Blast Personal Protective Equipment.. Safety signs, barricades, and attendants.
6. Lock Out Tag Out. LOTO and the Safety Plan. Lock out tag out. Restoring Equipment. Lock Out Tag Out Devices.
7. Personal Protective Equipment. Eye and Face

Protection. Head protection. Hearing Protection. Work boots. Work gloves. Respiratory Protection. Fall Protection. 8.Tool and Equipment Safety. Hand Tools. Power Tools. Ladders. Scaffold. Aerial Lift. Machinery Safety 9.Hazardous Working Environments. Hot Environments. Sun. Cold working environments. Confined spaces.

ELECTRICAL SAFETY VIDEO DVD

Delmar

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Viewers will get a first rate introduction to Electrical Safety from this DVD, which allows learners to understand all the most important elements in safety regulations associated with electrical theory. Enhanced with quality animations this DVD includes topics on

electrical hazards, electrical shock, arcing incident, personal protective equipment, lock out tag out procedures, safe work practices, proper use of electrical meters, hand tools, power tools and employer responsibility.

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Introduction. Electrical Shock. Arc Flash/Arc Blast. Introduction to Personal Protection Equipment. Fire Resistant (FR) Electrical Rated (ER) Clothing. Hearing and Lung Protection. Lockout/Tagout Procedures. Tools. Meters and Testers. Electrical Safety Program.

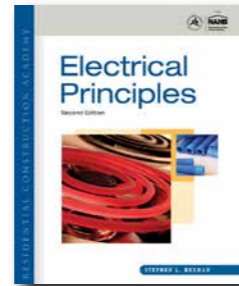
RESIDENTIAL CONSTRUCTION ACADEMY, 2E

Electrical Principles

Stephen L. Herman, Lee College (retired)

© 2012, 320pp, Hardback, 9781111306472

ebook



Through the use of a lively writing style and frequent examples, RESIDENTIAL CONSTRUCTION ACADEMY: ELECTRICAL PRINCIPLES, 2E covers the important topics that you need to know to become a residential electrician. The author, Stephen L. Herman,

logically presents the basic electrical principles from safety to motors and discusses how to go from theory to application. This text helps you learn the work skills, functions and activities included in the Residential Electrician Skill Standards developed by industry leaders for the National Association of Home Builders (NAHB). With its supplemental multimedia this text provides an integrated teaching solution directly linking your education/training program to the residential construction industry.

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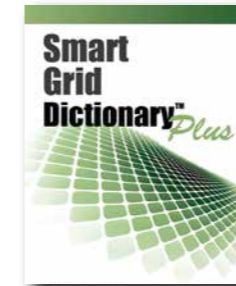
SECTION I: Basic Electricity. 1. Safety. 2. Basic Electrical Theory. 3. Electrical Quantities and Ohm's Law. 4. Resistor. 5. Series Circuits. 6. Parallel Circuits. 7. Combination Circuits. 8. Measuring Instruments. 9. Using Wire Tables and Determining Conductor Sizes. 10. Magnetic Induction. SECTION II: Alternating Current. 11. Alternating Current. 12. Inductance in Alternating Current Circuits. 13. Resistive-Inductive Series Circuits. 14. Resistive-Inductive Parallel Circuits. 15. Capacitors. 16. Single-Phase Transformers. 17. Single-Phase Motors.

SMART GRID DICTIONARY PLUS

Christine Hertzog

© 2012, 256pp, Paperback, 9781111540395

ebook



THE SMART GRID DICTIONARY PLUS aids you in building your foundation of Smart Grid knowledge. This learning dictionary includes terminology pertaining to electric utilities and regulatory agencies, energy efficiency and building

automation applications, energy storage, smart meters, and telecommunications and standards organizations. Technical concepts are covered in over 1200 Smart Grid definitions. You can make this handy reference into an interactive online learning experience with the content in CourseMate, which includes presentation slides with a high level overview of the Smart Grid ecosystem, flash cards to aid in knowledge retention, and quizzes to test comprehension of material. The accompanying CourseMate contains further research opportunities with agencies' website addresses, making this text the best tool for anyone who wants to learn more about the future of electricity and our electrical grids.

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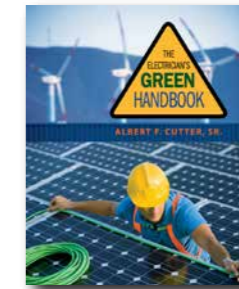
Table of Contents: Acknowledgements. Introduction. Numbers. A. B. C. D. E. F. G. H. I. J. J. L. M. N. O. P. Q. R. S. T. U. V. W. X/Y/Z.

THE ELECTRICIANS GREEN HANDBOOK

Albert F. Cutter, Sr.

© 2012, 288pp, Paperback, 9781111129804

ebook



THE ELECTRICIAN'S GREEN HANDBOOK is written for anyone with an interest in the inner workings of alternative energy systems. This book is written by an electrician about electrical systems for electricians, maintenance personnel and those looking to expand their

knowledge in alternative energy systems. Real world state of the art components are used in this book, complete with details and product specifications. Alternative energy systems discussed include Solar, Wind, Hydrogen and Battery Backup Systems. Unlike most other books written on the subject, THE ELECTRICIAN'S GREEN HANDBOOK, provides you with an understanding of these systems from an installation and maintenance point of view. Discussed in detail are the circuit configurations of stand-alone inverters, string inverters, central inverters, micro-inverters and rectifiers, which are the key components of any alternative energy installation used today. The National Electrical Code (NEC) 2011 is used throughout the text and systems are taken apart and the NEC 2011 is examined for each part of the systems. Monitoring the output of alternative energy systems is not only required for maximum efficiency, it is essential. This book covers the components, systems and topologies for monitoring the system functions and performance and is a must for the journeyman electrician and electrical students of all levels.

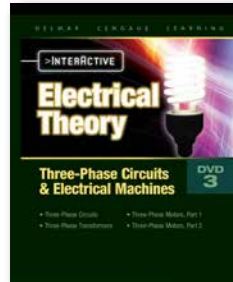
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ELECTRICAL THEORY 3-PHASE CIRCUITS AND ELECTRICAL MACHINES INTERACTIVE INSTITUTIONAL DVD (10-13)

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The ELECTRICAL THEORY 3-PHASE CIRCUITS AND ELECTRICAL MACHINES INTERACTIVE DVD contains a complete set of videos that have been enhanced with interactive graphics, animations, and questions that you can easily use as a homework

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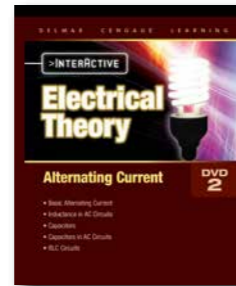
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Three-Phase Circuits. Three-Phase Transformers. Three-Phase Motors, Part 1. Three-Phase Motors, Part 2.

ELECTRICAL THEORY AC INTERACTIVE INSTITUTIONAL DVD

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Basic Alternating Current. Inductance in AC Circuits. Capacitors. Capacitors in AC Circuits. RLC Circuits.

ELECTRICAL THEORY SINGLE PHASE TRANSFORMERS & ELECTRICAL MACHINES INTERACTIVE INSTITUTIONAL DVD (14-17)

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The ELECTRICAL THEORY SINGLE PHASE TRANSFORMERS & ELECTRICAL MACHINES INTERACTIVE DVD contains a complete set of videos that have been enhanced with interactive graphics, animations, and questions that you can easily use as a homework solution, study guide, or supplemental online classroom instruction. The DVD set correlates directly to Delmar's Standard Textbook of Electricity, but also complements any of Delmar's existing electrical theory products. These interactive DVDs allow you to better connect with the subject matter while fulfilling instructor requirements for electronic learning material.

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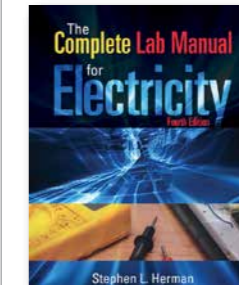
Single-Phase Transformers. DC Machines. Single-Phase Motors, Part 1. Single-Phase Motors, Part 2.

THE COMPLETE LAB MANUAL FOR ELECTRICITY, 4E

Stephen L. Herman, Lee College (retired)

© 2015, 480pp, Paperback, 9781133673828

ebook



Now you can master the hands-on electrical skills you need for professional success with THE COMPLETE LABORATORY MANUAL FOR ELECTRICITY, 4E by best-selling author Stephen Herman. No matter what electrical theory book you

are using, THE COMPLETE LABORATORY MANUAL FOR ELECTRICITY offers the perfect fit with a logical progression of topics and meaningful, cost-effective experiments. Updated lab activities throughout this edition now incorporate the use of wirewound resistors rather than incandescent lamps to correspond with the latest government regulations. You explore all aspects of electrical concepts — from basic electricity through AC theory, transformers, and motor controls. Each lab offers a clear explanation of the circuits to be connected, examples of the calculations to complete the exercise, and step-by-step procedures for conducting the experiment. Trust THE COMPLETE LABORATORY MANUAL FOR ELECTRICITY, 4E as a stand-alone resource or ideal supplement (e.g., to the Delmar Standard Textbook of Electricity) for mastery of the hands-on electrical skills you need the most.

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13. Capacitance. 14. Resistive-Capacitive Series Circuits. 15. RC Parallel Circuits. 16. Resistive-Inductive-Capacitive Series Circuits. 17. Resistive-Inductive-Capacitive Parallel Circuits. 18. Power Factor Correction. SECTION 4: TRANSFORMERS AND MOTORS. 19. Transformer Basics. 20. Single-Phase Transformer Calculations. 21. Transformer Polarities. 22. Autotransformers. 23. Three-Phase Circuits. 24. Three-Phase Transformers. 25. Three-Phase Motors. SECTION 5: MOTOR CONTROLS. 26. Start-Stop Push-Button Control. 27. Multiple Push-Button Stations. 28. Forward-Reverse Control. 29. Sequence Control. 30. Jogging Controls. 31. On-Delay Timers. 32. Off-Delay Timers. 33. Changing the Logic of an On-Delay Timer to an Off-Delay Timer. 34. Designing a Printing Press Circuit. 35. Sequence Starting and Stopping for Three Motors. 36. Hydraulic Press Control Circuit. 37. Design of Two Flashing Lights. 38. Design of Three Flashing Lights. 39. Control for Three Pumps. 40. Oil Pressure Pump Circuit for a Compressor. 41. Autotransformer Starter. Index.

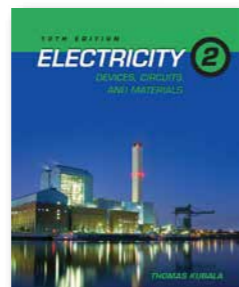
ELECTRICITY 2, 10E

Devices, Circuits and Materials

Thomas Kubala

© 2013, 168pp, Paperback, 9781111646714

ebook



Designed to help you learn fundamental electrical concepts and explore their practical applications, this trusted text provides a thorough introduction to various types of alternating current (AC) circuits, as well as key principles such as power, power factor, power

factor correction, inductive reactance, capacitive reactance, and impedance. **ELECTRICITY 2: DEVICES, CIRCUITS AND MATERIALS**, Tenth Edition, maintains the user-friendly style and proven instructional approach while incorporating new material and updates based on the 2011 National Electrical Code®. Featuring current industry terminology, photographs of commonly used electrical equipment, and sample problems with solutions, this convenient, affordable text is an ideal choice for anyone interested in mastering basic electricity, including AC power, wiring installation, lighting, and effective troubleshooting.

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1. Alternating-Current Principles. 2. Inductance and Inductive Reactance. 3. Capacitance and Capacitive Reactance. 4. Series Circuit: Resistance and Inductance. 5. Series Circuit: Resistance and Capacitance. 6. Series Circuit: Resistance, Inductance and Capacitance. 7. AC Parallel Circuits Containing Inductance. 8. AC Parallel Circuits Containing Inductance and Capacitance. 9. AC Power, Power Factor, and Power Factor Correction. 10. Summary Review of Units 1-9. 11. Installation of a Single-Phase, Three-Wire Service Entrance for a Single-Family Residence. 12. Installation of a Single-Phase, Three-Wire Service Entrance for an Apartment Building. 13. Installation of a Three-Phase, Three-Wire Service Entrance. 14.

Introduction to Fluorescent Lighting. 15. Installation of Fluorescent Lighting. 16. Summary Review of Units 11-15.

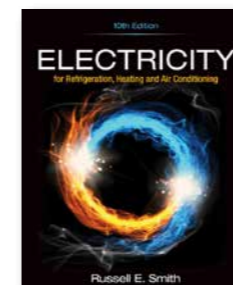
HVAC-R AND ELECTRICITY

ELECTRICITY FOR REFRIGERATION, HEATING, AND AIR CONDITIONING, 10E

Russell E. Smith, Athens Technical College

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Master the electrical principles and practices you need to succeed as a professional installation and service technician with this trusted guide. Accurate and easy-to-understand, **ELECTRICITY FOR REFRIGERATION, HEATING AND AIR**

CONDITIONING, Tenth Edition, will give you a strong foundation in essential electrical theory—and help you hone real-world skills and techniques you can apply on the job. Thoroughly updated for today's professionals, the Tenth Edition includes up-to-date information based on current trends, technology, and industry practices—including key diagnosis and troubleshooting methods—making this an ideal resource whether you're new to the field or a current practitioner ready to update your knowledge and skills. Now available with this text is *The Complete HVAC Lab Manual*, which features over 250 lab exercises, covering 15 topic areas. See the supplements section for more details.

CONTENTS

1. Electrical Safety. 2. Basic Electricity. 3. Electrical Circuits. 4. Electric Meters. 5. Components, Symbols, and Circuitry of Air-Conditioning Wiring Diagrams. 6. Reading Schematic Diagrams. 7. Alternating Current, Power Distribution, and Voltage

Systems. 8. Basic Electric Motors. 9. Components for Electric Motors. 10. Contactors, Relays, and Overloads. 11. Thermostats, Pressure Switches, and Other Electric Control Devices. 12. Electronic Control Devices. 13. Heating Control Devices. 14. Troubleshooting Electric Control Devices. 15. Residential Air-Conditioning Control Systems. 16. Installation of Heating, Cooling, and Refrigeration Systems. 17. Commercial and Industrial Air-Conditioning Control Systems. 18. Troubleshooting Refrigeration, Heating, and Air-Conditioning Control Circuits and Systems.

THE COMPLETE HVAC LAB MANUAL FOR SILBERSTEIN/OBRZUT'S ELECTRICITY FOR REFRIGERATION, HEATING, AND AIR CONDITIONING, 10E

Eugene Silberstein, Suffolk County Community College, Brentwood, NY; Jason Obrzut, Content Developer, The ESCO Institute, Mount Prospect, IL

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ebook



Featuring over 250 lab exercises, this lab manual is designed to provide practice for all activities performed in the refrigeration, heating, and air conditioning industry, with exercises correlated to the following solutions: Refrigeration and Air

Conditioning Technology, 7e, 8e, 9e; Electricity for Refrigeration, Heating and Air Conditioning, 8e, 9e, 10e; Heat Pumps, 2e and RCA: HVAC, 2e.

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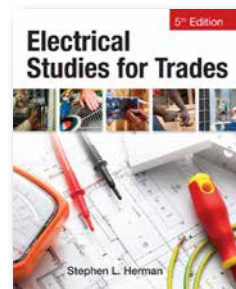
(AIR). 7. Electric Motors (MOT). 8. Heat Pump Systems (HPS). 9. Heating (HTG). 10. Mechanical System Troubleshooting (MST). 11. Controls (CON). 12. Domestic Appliances (DOM). 13. Installation and Start-Up (ISU). 14. Building Sciences (BSC). 15. Commercial and Industrial Systems (COM). Part 2: EXERCISE CORRELATIONS. Master Text Reference Guide. Electricity for Refrigeration, Heating and Air-Conditioning Lab Manual Exercise Number Cross Reference. Refrigeration and Air-Conditioning Technology Lab Manual and Workbook Exercise Number Cross Reference.

ELECTRICAL STUDIES FOR TRADES, 5E

Stephen L. Herman, Lee College (retired)

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ebook



Packed with real-world examples, vivid illustrations, and the latest developments from the field, **ELECTRICAL STUDIES FOR TRADES, 5th EDITION** is ideal for current and future service technicians in air conditioning and refrigeration, construction,

and facilities management—and anyone else who needs a practical knowledge of electricity. Extremely reader-friendly, the book begins with an overview of basic electricity concepts—rather than complex mathematical calculations. From here, you proceed directly to “must-know” information, including how to determine wire sizes and make a variety of common switch connections. Different types of electrical power panels are also examined in detail. Discussion of general wiring practices and circuit protectors, as well as an introduction to transformers and three-phase and single-phase motors, round out the comprehensive coverage.

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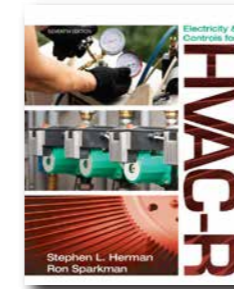
Preface. Unit 1. Atomic Structure. Unit 2. Electrical Quantities, Ohm’s Law, and Resistors. Unit 3. Electrical Sources and Static Charges. Unit 4. Magnetism. Unit 5. Series Circuits. Unit 6. Parallel Circuits. Unit 7. Combination Circuits. Unit 8. Measuring Instruments. Unit 9. Alternating Current. Unit 10. Alternating Current Loads. Unit 11. Capacitive Loads. Unit 12. Three-Phase Circuits. Unit 13. Transformers. Unit 14. Three-Phase Transformers. Unit 15. Electrical Services. Unit 16. General Wiring Practices Part 1: Receptacle and Switch Connections. Unit 17. General Wiring Practices Part 2: Protection Circuits, Dimmers, and Chimes. Unit 18. Three-Phase Motors. Unit 19. Single-Phase Motors. Unit 20. Schematics and Wiring Diagrams. Unit 21. Motor Installation.

ELECTRICITY AND CONTROLS FOR HVAC-R, 7E

Stephen L. Herman, Lee College (retired); Sparkman

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ebook



Offering the most up-to-date coverage available, **ELECTRICITY AND CONTROLS FOR HVAC-R, 7e** emphasizes the basics as it equips you with the information needed to work effectively with all types of motors and control devices found in the heating and

air-conditioning industry. Extremely student friendly, the text requires no prior knowledge of electricity. It begins with discussions of essential basic electricity and electrical circuits concepts—ensuring thorough understanding before advancing to other topics. In addition, detailed schematic diagrams and step-by-step troubleshooting procedures highlight all of the different types of circuits commonly encountered in the HVAC-R field. The Seventh Edition is packed with vibrant photos, engaging illustrations, and coverage of the latest technology and developments from the field. It also reflects the current National Electrical Code® requirements.

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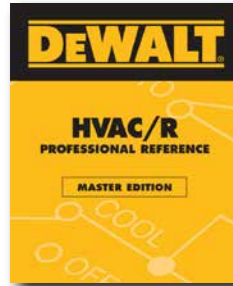
Part I: BASIC ELECTRICITY. 1. Atomic Structure. 2. Electrical Quantities and Ohm’s Law. 3. Measuring Instruments. 4. Electrical Circuits. 5. Electrical Services. 6. Wire Size and Voltage Drop. 7. Inductance. 8. Capacitance. Part II: CONTROL CIRCUITS. 9. Schematic and Wiring Diagrams. 10. Developing Wiring Programs. Part III: MOTORS. 11. Split-Phase Motors. 12. The Shaded-Pole Induction Motor. 13. Multispeed Motors. 14. Three-Phase Motor Principles. 15. The Squirrel-Cage Induction Motor. 16. The Wound Rotor Induction Motor. 17. The Synchronous Motor. 18. Brushless DC Motors. Part IV: TRANSFORMERS. 19. Isolation Transformers. 20. Autotransformers. 21. Current Transformers. Part V: CONTROL COMPONENTS.

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INDUSTRIAL ELECTRICITY & MOTOR CONTROL

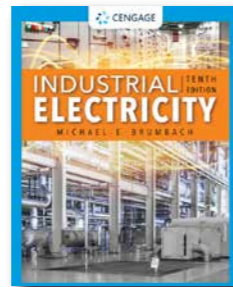
NEW EDITION

INDUSTRIAL ELECTRICITY, 10E

Michael E. Brumbach, York Technical College, Rock Hill, South Carolina

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INDUSTRIAL ELECTRICITY, Tenth Edition, presents the essentials of electrical theory in a clear, current, logical manner to help you master both fundamental concepts and more advanced subjects relevant to the field of industrial

electricity. Coverage begins with foundational topics like safety, electrical symbols and drawings, current, voltage, resistance and power, while subsequent chapters introduce Ohm's Law; series, parallel and combination circuits; and resistive and reactive circuits. The text also includes thorough discussion of advanced subjects such as test equipment, rotating machinery, motor controls, transformers, electronic drives and PLCs, as well as practical information on key real-world applications of electrical theory, including installation, maintenance and troubleshooting. The Tenth Edition features more than 800 illustrations and photos--now presented in vibrant, full color for a more visually engaging learning experience--to help explain key concepts and bring both theory and practice to life.

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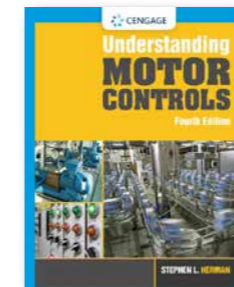
Control and Controlled Devices. 15. Motor Control Circuits. 16. Variable Frequency Drives (VFDs). 17. Programmable Logic Controllers (PLCs). 18. Lighting. Glossary. Index.

UNDERSTANDING MOTOR CONTROLS, 4E

Stephen L. Herman, Lee College (retired)

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Designed for students with no previous experience in motor controls, Herman's UNDERSTANDING MOTOR CONTROLS, 4E introduces basic principles and guides readers from learning about common motor control components to understanding how to use

components in motor control circuits. Numerous up-to-date illustrations depict troubleshooting circuits while thorough explanations detail basic types of meters and test equipment to troubleshoot control circuits. An updated chapter on installing motors corresponds with the National Electrical Code and clearly illustrates how to select overload heater sizes. Using actual motor control components, hands-on laboratory experiments enable students to practice the concepts they've learned. These student-friendly experiments start with simple circuits before advancing to more complicated circuits involving timing relays and auto-transformer starters.

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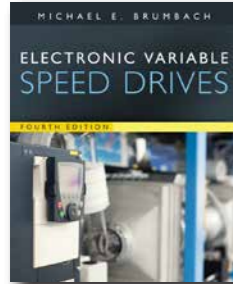
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ELECTRONIC VARIABLE SPEED DRIVES, 4E

Michael E. Brumbach, York Technical College, Rock Hill, South Carolina; Jeffrey A. Clade, York Technical College, Rock Hill, South Carolina

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ebook



Gain a thorough understanding of today's electronic variable speed drives with this one-of-a-kind practical guide. **ELECTRONIC VARIABLE SPEED DRIVES, 4E** provides the information essential for mastering DC and inverter drive

technology. Using a logical structure, this book introduces fundamental drive circuits before presenting more complex drive circuits. This new edition highlights the most current technology advances for drives. The authors use their extensive industry and teaching experience to present theory in a clear, straightforward manner with the emphasis you need on both troubleshooting and maintenance. New hands-on activities provide additional practice using the Allen-Bradley PowerFlex 70, while numerous waveform schematics guide you through operating different types of drives and interpreting their circuitry. Specific chapters focus on digital regenerative DC drives and frequency inverters as well as mechanical and electrical installation, set-up, tuning, programming, operating, and troubleshooting of each drive.

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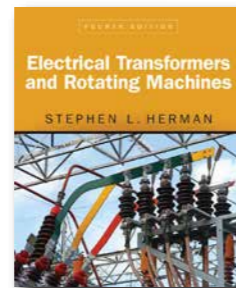
Slave. Activity 5-7: Skip Frequencies. Activity 5-8: S-Curves. Activity 5-9: Braking. Activity 5-10: Voltage Boost. Activity 5-11: Operating Above Base Motor Speed. 6. VFD Troubleshooting and Maintenance. Activity 6-1: I/O Waveforms. Activity 6-2: Checking IGBT Modules. 7. DC Drives. Glossary. Index.

ELECTRICAL TRANSFORMERS AND ROTATING MACHINES, 4E

Stephen L. Herman, Lee College (retired)

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Written specifically for future electricians, **ELECTRICAL TRANSFORMERS AND ROTATING MACHINES, 4e** delivers comprehensive coverage that reflects real-world practice. Extremely student friendly, the book uses common language in a format that is easy to understand.

Offering the ideal blend of theory and hands-on applications, it integrates experiments throughout – enabling you to put what you learn into practice. In addition, insightful schematics and illustrations ensure your thorough understanding of key concepts.

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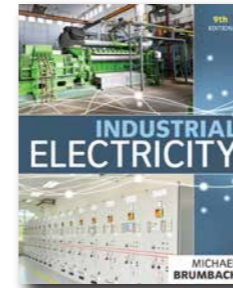
1. Magnetism. 2. Magnetic Induction. 3. Inductance in Alternating-Current Circuits. 4. Single-Phase Isolation Transformers. 5. Autotransformers. 6. Current Transformers. 7. Three-Phase Circuits. 8. Three-Phase Transformers. 9. Single-Phase Loads for Three-Phase Transformers. 10. Transformer Installation. 11. Transformer Cooling. 12. Transformer Maintenance. 13. Harmonics. 14. Direct Current Generators. 15. Direct Current Motors. 16. Alternators. 17. Three-Phase Motors. 18. Single-Phase Motors. 19. Motor Maintenance and Troubleshooting. 20. Motor Nameplate Data. 21. Motor Installation.

INDUSTRIAL ELECTRICITY, 9E

Michael E. Brumbach, York Technical College, Rock Hill, South Carolina

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Coverage begins with foundational topics like electrical symbols and drawings, current, voltage, resistance, and power, while subsequent chapters introduce Ohm's Law; series, parallel, and combination circuits; and resistive and reactive circuits. The text also includes thorough discussion of advanced subjects such as rotating machinery, motor controls, transformers, electronic drives, and PLCs, as well as practical information on key real-world applications of electrical theory, including installation, maintenance, and troubleshooting. The Ninth Edition features more than 800 illustrations and photos to help explain key concepts and bring theory and practice alike to life.

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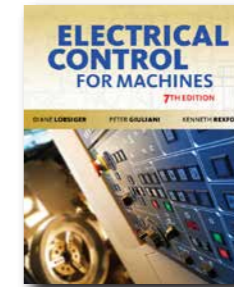
1. Language of Electricity. 2. Electrical Fundamentals. 3. Electrical Power and Energy. 4. Test Equipment. 5. Basic Resistive Electrical Circuits. 6. Magnets and Magnetism. 7. Alternating Current. 8. AC Circuits. 9. Conductor Types and Sizes. 10. Wiring Methods. 11. Wiring Applications. 12. Transformers. 13. Electrical Distribution. 14. Lighting. 15. Electric Heat. 16. DC Generators. 17. DC Motors. 18. AC Generators (Alternators). 19. AC Motors. 20. Motor Control Devices and Circuits. 21. Basic Industrial Electronics. 22. DC Electronic Variable Speed Drives. 23. AC (Inverter) Drives. 24. Programmable Logic Controllers. Appendix A. Appendix B. Appendix C. Glossary. Index.

ELECTRICAL CONTROL FOR MACHINES, 7E

Diane Lobsiger, Delta College

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Reflecting the latest trends and practices from industry, the cutting-edge new **ELECTRICAL CONTROLS FOR MACHINES, 7e** delivers a thorough introduction to the range of technologies found in today's electrical machine controls. Completely up to

date, circuit diagrams and the descriptions of the circuits illustrate a modern representation of the controls circuits. The text also offers expansive coverage of the power and control circuitry required to operate electrical machinery. While it discusses the trend away from relay control to PLC control, the text maintains solid coverage of relay circuits. Its emphasis on the critical importance of worker and equipment safety in industrial settings includes a detailed explanation of the risk assessment process and a safety relay circuit. In addition, the inclusion of international equipment specifications reflects the dramatic impact of globalization and integration of businesses on the way industries function.

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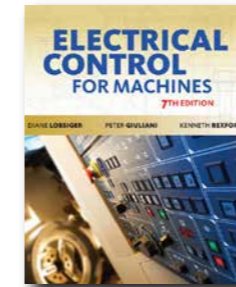
MOTORS AND DRIVES. DC Motors-Principles of Operation. DC Motors. AC Motors-Theory of Operation. Polyphase Squirrel-Cage Induction Motors. Variable Frequency Drives. Single-Phase Motors. Resistance Split-Phase Motors. Capacitor Start Motors. Permanent Split-Capacitor Motors. Shaded-Pole Motors. Brushless DC Motors. 14. MOTOR STARTERS. Contacts and Overload Relays. Across-the-Line (Full-Voltage) Starters. Reversing Motor Starters. Multispeed Motor Starters. Additional Across-the-Line Starter Circuits. Reduced-Voltage Motor Starters. Solid-State Motor Starters. Starting Sequence. 15. INTRODUCTION TO PROGRAMMABLE CONTROL. Primary Concepts of Relay Control. Introduction to Programmable Logic Controllers. Programmable Logic Controller Concepts. PLC Input/Output (I/O). Processor. Memory. Power Supplies. Programming. Examine On/Examine Off. Programming Devices. Data Communications. Converting from Relay Logic to PLC. 16. INDUSTRIAL DATA COMMUNICATIONS. Overview. Industrial Information Technology Architecture. Data Communication Network Concepts. Data Transmission. Industrial Data Highway. Network Topologies. Industrial Networks. Data Transfer Rate. Ethernet and the Information Highway. Transmission Media. Troubleshooting Networks. Open Systems Versus Proprietary Systems. Network Layers. Typical Network Systems. 17. QUALITY CONTROL. Defining Quality and Quality Control. Electrical and Electronic Circuits Used in Quality Control. Quality Achieved Through Machine and Process Monitoring. Process Tolerance (Standards). Information Systems. Maintaining Quality. 18. SAFETY. Worker Safety. Machine Safety. Diagnostic Systems. Machine Safety Circuit. Programmable Controllers in Safety. Other Safety Conditions. 19. TROUBLESHOOTING. Safety First. Analyzing the Problem. Major Trouble Spots. Equipment for Troubleshooting. Motors. Troubleshooting a Complete Control Circuit. Troubleshooting the Programmable Logic Controller. Electronic Troubleshooting Hints. 20. DESIGNING CONTROL SYSTEMS FOR EASY MAINTENANCE. Design Considerations. Diagrams and Layouts. Locating, Assembling, and Installing Components.

ELECTRICAL CONTROL FOR MACHINES, 7E

Diane Lobsiger, Delta College

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Reflecting the latest trends and practices from industry, the cutting-edge new ELECTRICAL CONTROLS FOR MACHINES, 7e delivers a thorough introduction to the range of technologies found in today's electrical machine controls. Completely up to

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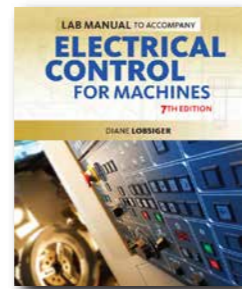
MOTORS AND DRIVES. DC Motors-Principles of Operation. DC Motors. AC Motors-Theory of Operation. Polyphase Squirrel-Cage Induction Motors. Variable Frequency Drives. Single-Phase Motors. Resistance Split-Phase Motors. Capacitor Start Motors. Permanent Split-Capacitor Motors. Shaded-Pole Motors. Brushless DC Motors. 14. MOTOR STARTERS. Contacts and Overload Relays. Across-the-Line (Full-Voltage) Starters. Reversing Motor Starters. Multispeed Motor Starters. Additional Across-the-Line Starter Circuits. Reduced-Voltage Motor Starters. Solid-State Motor Starters. Starting Sequence. 15. INTRODUCTION TO PROGRAMMABLE CONTROL. Primary Concepts of Relay Control. Introduction to Programmable Logic Controllers. Programmable Logic Controller Concepts. PLC Input/Output (I/O). Processor. Memory. Power Supplies. Programming. Examine On/Examine Off. Programming Devices. Data Communications. Converting from Relay Logic to PLC. 16. INDUSTRIAL DATA COMMUNICATIONS. Overview. Industrial Information Technology Architecture. Data Communication Network Concepts. Data Transmission. Industrial Data Highway. Network Topologies. Industrial Networks. Data Transfer Rate. Ethernet and the Information Highway. Transmission Media. Troubleshooting Networks. Open Systems Versus Proprietary Systems. Network Layers. Typical Network Systems. 17. QUALITY CONTROL. Defining Quality and Quality Control. Electrical and Electronic Circuits Used in Quality Control. Quality Achieved Through Machine and Process Monitoring. Process Tolerance (Standards). Information Systems. Maintaining Quality. 18. SAFETY. Worker Safety. Machine Safety. Diagnostic Systems. Machine Safety Circuit. Programmable Controllers in Safety. Other Safety Conditions. 19. TROUBLESHOOTING. Safety First. Analyzing the Problem. Major Trouble Spots. Equipment for Troubleshooting. Motors. Troubleshooting a Complete Control Circuit. Troubleshooting the Programmable Logic Controller. Electronic Troubleshooting Hints. 20. DESIGNING CONTROL SYSTEMS FOR EASY MAINTENANCE. Design Considerations. Diagrams and Layouts. Locating, Assembling, and Installing Components.

LAB MANUAL FOR LOBSIGER'S ELECTRICAL CONTROL FOR MACHINES, 7TH, 7E

Diane Lobsiger, Delta College

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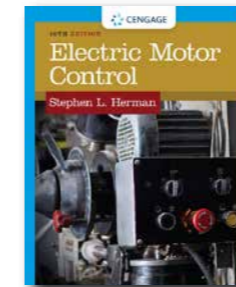
The Laboratory Manual is a valuable tool designed to enhance your lab experience. Lab activities, objectives, materials lists, step-by-step procedures, illustrations, and review questions are commonly found in a Lab Manual.

ELECTRIC MOTOR CONTROL, 10E

Stephen L. Herman, Lee College (retired)

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Updated with the latest technology, machines, and controls in the industry, **ELECTRIC MOTOR CONTROL, 10E** delivers comprehensive coverage and practical insight for anyone who will install, monitor, and/or maintain motor controls. Extremely

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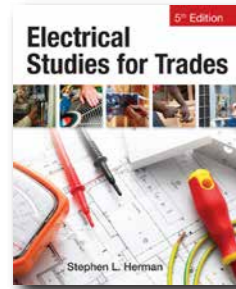
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60. Troubleshooting Techniques.

ELECTRICAL STUDIES FOR TRADES, 5E

Stephen L. Herman, Lee College (retired)

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Packed with real-world examples, vivid illustrations, and the latest developments from the field, **ELECTRICAL STUDIES FOR TRADES, 5th EDITION** is ideal for current and future service technicians in air conditioning and refrigeration, construction, and facilities management--and

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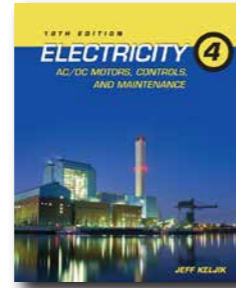
ELECTRICITY 4, 10E

AC/DC Motors, Controls, and Maintenance

Jeffrey J. Keljik, Dunwoody Institute, Minneapolis, MN

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Updated to the 2011 National Electrical Code®, **ELECTRICITY 4: AC/DC MOTORS, CONTROLS, AND MAINTENANCE, 10e** delivers practical coverage of AC/DC motors, controls, and maintenance. It offers you quick and easy access to current information on DC

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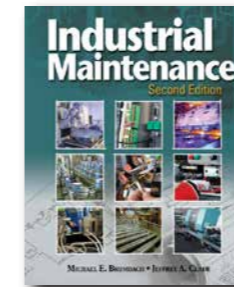
1. The DC Shunt Motor. 2. The DC Series Motor. 3. DC Compound Motors. 4. Summary of Units 1-3. 5. Starting and Operating DC Motors. 6. Electronic DC Motor Control. 7. DC Variable Speed Control. 8. DC Motor Dynamic Braking. 9. Basic Principles of Automatic Motor Control. 10. Relays and Timers. 11. Summary of Units 5-10. 12. Three Phase AC Induction Motors. 13. Starting Three Phase Induction Motors. 14. Controllers for Three Phase Motors. 15. Solid State Starters and Controls. 16. Wound Rotor Induction Motor. 17. The Synchronous Motor. 18. Summary of Units 12-17. 19. Single Phase AC Motors. 20. Special Motor Application. 21. Universal, Series and Repulsion Motors. 22. Energy Efficiency and Motors. 23. Three Phase Motor Installations and the NEC. 24. Single Phase and DC Motor Installation and the NEC. 25. Motor Maintenance. 26. Summary of Units 19-25. Glossary. Index.

INDUSTRIAL MAINTENANCE, 2E

Michael E. Brumbach, York Technical College, Rock Hill, South Carolina; Jeffrey A. Clade, York Technical College, Rock Hill, South Carolina

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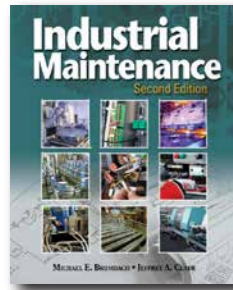
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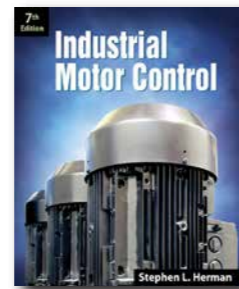
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INDUSTRIAL MOTOR CONTROL, 7E

Stephen L. Herman, Lee College (retired)

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INDUSTRIAL MOTOR CONTROL 7E is an integral part of any electrician training. Comprehensive and up to date, this book provides crucial information on basic relay control systems, programmable logic controllers, and solid state devices commonly

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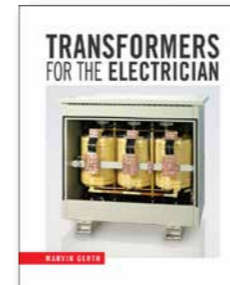


TRANSFORMERS FOR THE ELECTRICIAN

Marvin Gerth, Anoka Technical College

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Today's electrical students are looking for a resource that moves beyond traditional textbooks to get more than just transformer theory, but also the practical information that can be put to use in everyday situations once they enter the world of work. TRANSFORMERS

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2. Transformer calculations and transformer losses.
3. Single phase transformers.
4. Three phase transformers.
5. Special types of transformers.
6. Transformer construction and maintenance.
7. NEC transformer requirements.

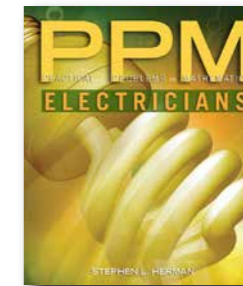
MATHEMATICS

PRACTICAL PROBLEMS IN MATHEMATICS FOR ELECTRICIANS, 9E

Stephen L. Herman, Lee College (retired)

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PRACTICAL PROBLEMS IN MATHEMATICS FOR ELECTRICIANS, 9E will give you the math skills you need to succeed in the electrical trade. It introduces you to the important math principles through problems designed for the electrical profession and offers you

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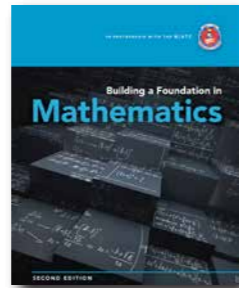
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BUILDING A FOUNDATION IN MATHEMATICS, 2E

National Joint Apprenticeship Training Committee; John C. Peterson, Chattanooga State Technical Community College

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NATIONAL ELECTRICAL CODE

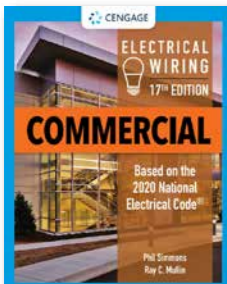
NEW EDITION

ELECTRICAL WIRING COMMERCIAL, 17E

Phil Simmons, Simmons Electrical Services; Ray C. Mullin

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Completely revised and updated to reflect the 2020 National Electrical Code® (NEC®), **ELECTRICAL WIRING COMMERCIAL**, Seventeenth Edition, offers the most current coverage available. This reader-friendly, trusted resource is filled with vibrant, full-color

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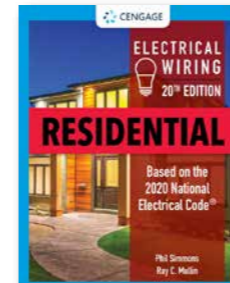
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Ray C. Mullin; Phil Simmons, Simmons Electrical Services

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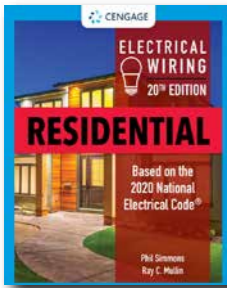
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Ray C. Mullin; Phil Simmons, Simmons Electrical Services

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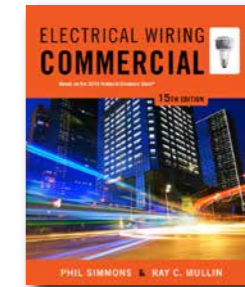
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ELECTRICAL WIRING COMMERCIAL, 15E

Phil Simmons, Simmons Electrical Services; Ray C. Mullin

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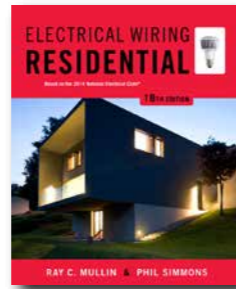
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ELECTRICAL WIRING RESIDENTIAL, 18E

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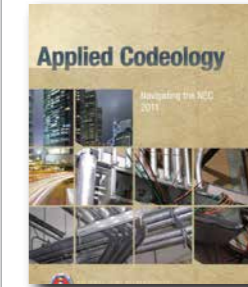
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APPLIED CODEOLOGY, 3E

Navigating the NEC® 2011

National Joint Apprenticeship Training Committee

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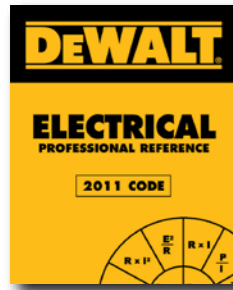
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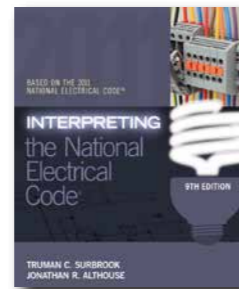
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INTERPRETING THE NATIONAL ELECTRICAL CODE, 9E

Truman Surbrook, Michigan State University; Jonathan Althouse, Michigan State University

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NATIONAL ELECTRICAL CODE 2011

National Fire Protection Association, Quincy, Massachusetts

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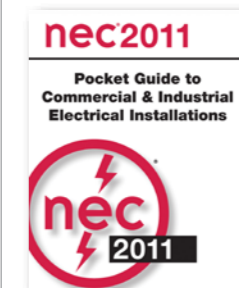


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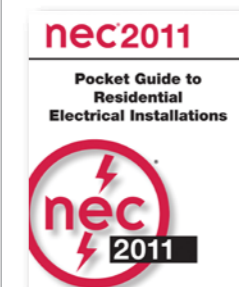


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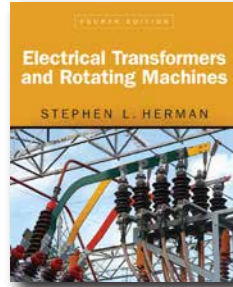
PROGRAMMABLE CONTROLLERS

ELECTRICAL TRANSFORMERS AND ROTATING MACHINES, 4E

Stephen L. Herman, Lee College (retired)

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Serial Adapter. 21. Installing and Configuring a USB Driver for 1756-L7 Series Controllers. 22. Determine and Modify a Personal Computer IP address. 23. Determine and Modify a Modular ControlLogix Ethernet IP Address. 24. Determine and Modify a 1769-CompactLogix Ethernet IP Address. 25. Configuring a 1756-ENET Ethernet using RSLinx. 26. Configuring Ethernet/IP Drivers using RSLinx. 27. Configuring CompactLogix 1769-L23E, 1769-L32E, or 1769-L35E Ethernet /IP Driver using RSLinx Software. 28. Configuring an USB Driver for an Ethernet Communications Module.

TECHNICIAN'S GUIDE TO PROGRAMMABLE CONTROLLERS, 6E

Terry Borden, Spokane Community College in Spokane; Richard A. Cox

© 2013, 416pp, Paperback, 9781111544096

CENGAGE | MINDTAP ebook



Practical and up-to-date, **TECHNICIAN'S GUIDE TO PROGRAMMABLE CONTROLLERS, 6th Edition** provides you with the most comprehensive introduction to PLCs available on the market today. Each topic is discussed in a way that is

easy to understand and apply, ensuring that you are prepared for class as well as for your future career. Theory, hardware, instructions, programming, installation, startup, and troubleshooting are discussed in detail. In addition, supplementary programming examples utilizing the PLC instructions in the text give you a better understanding of the various instructions and how they can be combined to create simple yet effective control logic solutions for today's world.

CONTENTS

Preface. 1. What is a Programmable Logic Controller (PLC)? 2. Understanding the Input/Output (I/O) Section. 3. Processor Unit. 4. Memory Organization. 5. Numbering Systems. 6. Understanding and Using Ladder Diagrams. 7. Relay Type Instructions. 8. Programming a PLC. 9. Programming Considerations. 10. Program Control Instructions. 11. Programming Timers. 12. Programming Counters. 13. Data Manipulation. 14. Math Functions. 15. Word and Array (file) Instructions. 16. Sequencers. 17. Process Control Signals, Scaling, and PID Instructions. 18. Function Block Programming. 19. Sequential Function Chart Programming. 20. Structured Text Programming. 21. Alarm and Event Programming. 22. Understanding Communication Networks. 23. Start Up and Troubleshooting. 24. PLC Programming Examples. Glossary. Index.

QUICK START TO PROGRAMMING ALTERNATIVE CONTROLLOGIX LANGUAGES

Jon Stenerson, Fox Valley Technical College, Appleton, Wisconsin

© 2012, 192pp, Paperback, 9781111309718

ebook



QUICK START TO PROGRAMMING ALTERNATIVE CONTROLLOGIX LANGUAGES, 1E is a practical, easy to understand, step-by-step book that covers such ControlLogix alternative languages as Structured Text, Sequential Function Chart, and Function Block languages. Additional tutorials are also available through the online companion site. This additional content features Camtasia learning videos and explanations of setup of RSLinx, project development, tag creation, configuration, instructions, examples of each language, and much more. The chapter questions will help you understand each language and Add-On instructions.

CONTENTS

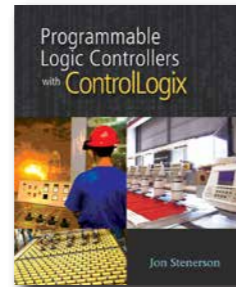
1. Project Organization and Addressing.
2. Structured Text Programming.
3. Sequential Function Chart Programming.
4. Function Block Programming.
5. Add-On Instructions.

PROGRAMMABLE LOGIC CONTROLLERS WITH CONTROLLOGIX

Jon Stenerson, Fox Valley Technical College, Appleton, Wisconsin

© 2010, 512pp, Paperback, 9781435419476

ebook



PROGRAMMING CONTROLLOGIX PROGRAMMABLE AUTOMATION CONTROLLERS strength is its breadth and depth of coverage, taking the reader from an overview of the Programmable Logic Controllers through ladder

logic, structured text, sequential function chart, and function block programming. To aid in learning, the book features a DVD with Camtasia learning videos and explanations of setup of RSLinx, project development, tag creation, configuration, instructions and much more. Students learn more and more easily because of the breadth of practical coverage, numerous examples and extensive exercises.

CONTENTS

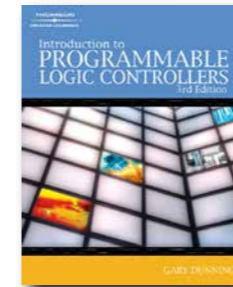
1. Introduction to Control Technology.
2. Project Organization and Addressing.
3. Ladder Logic Programming.
4. Timers and Counters.
5. ControlLogix Modules and their Wiring.
6. Industrial Sensors.
7. Math Instructions.
8. Special Instructions.
9. Structured Text Programming.
10. Sequential Function Chart Programming.
11. Function Block Programming.
12. Industrial Communications.
13. ControlLogix Motion Control.
14. Risk Assessment and Safety.
15. Risk Reduction and Safety Devices.
16. Installation and Troubleshooting.
17. Lockout/Tagout.
- Appendix A - Starting a New Project.
- Appendix B - Configuring I/O Modules in a Remote Chassis.
- Appendix C - The Use of Producer/Consumer Tags.
- Appendix D - ControlLogix Messaging.
- Appendix E - Configuring ControlLogix for Motion.

INTRODUCTION TO PROGRAMMABLE LOGIC CONTROLLERS, 3E

Gary Dunning, Hennepin Technical College

© 2006, 640pp, Paperback, 9781401884260

ebook



To assist readers in understanding key concepts, the art program has been modernized to include improved illustrations, current manufacturer-specific photos, and actual RSLogix software screens to visibly illustrate essential principles

of PLC operation.

CONTENTS

- Chapter 1 Welcome to the World of Programmable Logic Controllers
- Chapter 2 Micro Programmable Logic Controllers
- Chapter 3 Programming a Programmable Controller
- Chapter 4 Number Systems
- Chapter 5 Introduction to PLC Operation
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- Chapter 7 Input Modules
- Chapter 8 Output Modules
- Chapter 9 Putting Together a Modular PLC
- Chapter 10 PLC Processors
- Chapter 11 Introduction to ControlNet and DeviceNet
- Chapter 12 Processor Data Organization
- Chapter 13 The Basic Relay Instructions
- Chapter 14 Understanding Relay Instructions and the Programmable Controller Input Modules
- Chapter 15 Documenting Your PLC System
- Chapter 16 Timer and Counter Instructions
- Chapter 17 Comparison and Data-Handling Instructions
- Chapter 18 Sequencer Instructions
- Chapter 19 Program Flow Instructions

REFERENCE

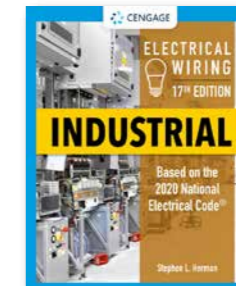
NEW EDITION

ELECTRICAL WIRING INDUSTRIAL, 17E

Stephen L. Herman, Lee College (retired)

© 2021, 400pp, Paperback, 9780357142189

CENGAGE | MINDTAP ebook



With step-by-step guidance and a reader-friendly style, ELECTRICAL WIRING INDUSTRIAL, Seventeenth Edition, helps you gain the basic knowledge and skills you need to safely install wiring systems in an industrial building. Packed with vivid, full-color photographs and

illustrations to help bring key concepts to life, the text also features lots of example problems and detailed solutions that clearly illustrate how important ideas apply to real-world situations. The Seventeenth Edition has been thoroughly updated to reflect the 2020 National Electric Code®, the industry standard for layout and construction of electrical systems. In addition, a set of building blueprints is included to help you connect chapter concepts to realistic industrial building project.

CONTENTS

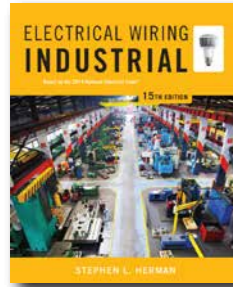
1. Plans and Sitework.
2. The Unit Substation.
3. Feeder Bus System.
4. Panelboards.
5. Trolley Busways.
6. Using Wire Tables and Determining Conductor Sizes.
7. Signaling Systems.
8. Basic Motor Controls.
9. Motors and Controllers.
10. Motor Installation.
11. Power Factor.
12. Ventilating, Air Conditioning, and Other Facilities.
13. System Protection.
14. Lightning Protection.
15. Site Lighting.
16. Programmable Logic Controllers.
17. Developing a Program for a PLC.
18. Fiber Optics.
19. Hazardous Locations.
20. Harmonics.
- Appendix: Electrical Specifications. Code Index. Index.

ELECTRICAL WIRING INDUSTRIAL, 15E

Stephen L. Herman, Lee College (retired)

© 2015, 352pp, Paperback, 9781285054216

ebook



ELECTRICAL WIRING INDUSTRIAL, 15E is the complete, step-by-step guide and on-the-job reference tool for wiring industrial buildings according to the current 2014 National Electrical Code®.

CONTENTS

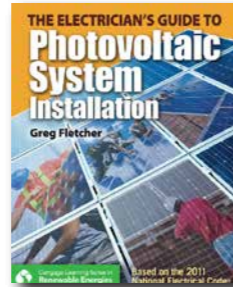
1. Plans and Sitework. 2. The Unit Substation. 3. Feeder Bus System. 4. Panelboards. 5. Trolley Busways. 6. Using Wire Tables and Determining Conductor Sizes. 7. Signaling Systems. 8. Motors and Controllers. 9. Motor Installation. 10. Power Factor. 11. Ventilating, Air Conditioning, and Other Facilities. 12. System Protection. 13. Lightning Protection. 14. Site Lighting. 15. Programmable Logic Controllers. 16. Fiber Optics. 17. Hazardous Locations. 18. Harmonics.

THE GUIDE TO PHOTOVOLTAIC SYSTEM INSTALLATION

Gregory W. Fletcher, Kennebec Valley Community College

© 2014, 352pp, Paperback, 9781111639969

CENGAGE | MINDTAP ebook



Written with the installing electrician in mind, THE GUIDE TO PHOTOVOLTAIC SYSTEM INSTALLATION provides you with a simple, straightforward approach to understanding photovoltaic system installation in both residential and light

commercial buildings. Filled with illustrations, examples, and multiple opportunities for practice, this comprehensive book includes the most up-to-date information on photovoltaic installation available on the market today. In addition, coverage of topics such as the National Electrical Code® requirements for a photovoltaic system installation ensures that you will be well prepared for the North American Board of Certified Energy Practitioners' (NABCEP) entry level photovoltaic installer certification exam.

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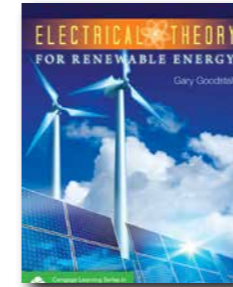
1. Introduction to Photovoltaics. 2. PV System Installation Safety. 3. Understanding Electricity Basics. 4. Solar Fundamentals. 5. PV Modules. 6. Batteries. 7. Charge Controllers. 8. Inverters. 9. PV System Wiring and the NEC. 10. Sizing PV Systems. 11. Installing PV Systems. 12. Maintaining and Troubleshooting a PV System. Appendices.

ELECTRICAL THEORY FOR RENEWABLE ENERGY

Gary Goodstal

© 2013, 352pp, Paperback, 9781133127550

ebook



Essential for anyone interested in a career in renewable energy, ELECTRICAL THEORY FOR RENEWABLE ENERGY presents a solid foundation of electrical theory and applications for both photovoltaic (PV) power and wind power in

one engaging text. Designed to apply to electricians as well as individuals specializing in PV and wind turbines, each chapter provides a common technical language and knowledge base for all renewable energy practitioners so that all members of the team (i.e., practitioners, designers, installers, and engineers) are able to work together effectively in the field. With multiple examples and opportunities for practice, this text covers the basic electrical theory that is required for you to understand any renewable energy source that generates electricity.

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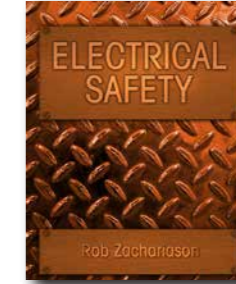
1. Atomic Theory. 2. Resistors, Capacitors and Inductors. 3. Electrical Measurement and Ohm's Law. 4. Series DC Circuit Calculations. 5. Parallel DC Circuit Calculations. 6. AC Power. 7. AC Circuit Calculations. 8. Batteries. 9. PV Cells and Arrays. 10. Wind Turbines and Electric Power Generation.

ELECTRICAL SAFETY

Rob Zacharason, Minnesota State Community and Technical College

© 2012, 288pp, Paperback, 9781435481855

ebook



Can your understanding of electrical safety ever be too thorough? ELECTRICAL SAFETY utilizes photographs, line art, and easy to follow language to stress the importance of safety when working around electricity. The text is written through the eyes of an

electrical worker to give accurate scenarios of potential hazards such as electric shock and arcing incidents. Details on personal safety, hazardous working conditions and safety organizations such as OSHA and NFPA 70E make this book the perfect choice for beginner electricians.

CONTENTS

1. Safety Overview. Construction Awareness. Construction Hazards. Cuts. Jewelry. Horseplay. Alcohol and Drugs 2. Safety Organizations, Standards and Certifications Occupational Safety and Health Administration (OSHA). NFPA 70E (Standard for Electrical Safety in the Workplace). National Institute for Occupational Safety and Health (NIOSH). First Aid-CPR-AED 3. Electrical Shock. Electricity and the Human Body. Witnessing a Shock. How to work safely around electricity. Ground Fault Circuit Interrupter (GFCI). 4. Arcing Incident. Arcing Incident. Arc Flash. Arc Blast. Causes of an Arcing incident. Arcing Incident Protection 5. Working on energized equipment. When is it permitted to work on energized equipment? Approach boundaries. Working on energized equipment. Awareness. Personal Protective Equipment. Arcing Flash/Blast Personal Protective Equipment.. Safety signs, barricades, and attendants. 6. Lock Out Tag Out. LOTO and the Safety Plan. Lock out tag out. Restoring Equipment. Lock Out Tag Out Devices. 7. Personal Protective Equipment. Eye and Face

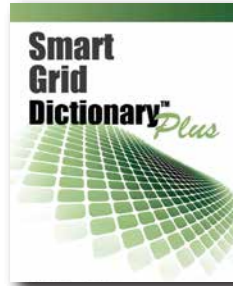
Protection. Head protection. Hearing Protection. Work boots. Work gloves. Respiratory Protection. Fall Protection. 8. Tool and Equipment Safety. Hand Tools. Power Tools. Ladders. Scaffold. Aerial Lift. Machinery Safety 9. Hazardous Working Environments. Hot Environments. Sun. Cold working environments. Confined spaces.

SMART GRID DICTIONARY PLUS

Christine Hertzog

© 2012, 256pp, Paperback, 9781111540395

ebook



THE SMART GRID DICTIONARY PLUS aids you in building your foundation of Smart Grid knowledge. This learning dictionary includes terminology pertaining to electric utilities and regulatory agencies, energy efficiency and building

automation applications, energy storage, smart meters, and telecommunications and standards organizations. Technical concepts are covered in over 1200 Smart Grid definitions. You can make this handy reference into an interactive online learning experience with the content in CourseMate, which includes presentation slides with a high level overview of the Smart Grid ecosystem, flash cards to aid in knowledge retention, and quizzes to test comprehension of material. The accompanying CourseMate contains further research opportunities with agencies' website addresses, making this text the best tool for anyone who wants to learn more about the future of electricity and our electrical grids.

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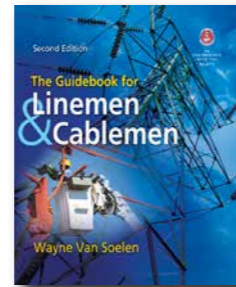
Table of Contents: Acknowledgements. Introduction. Numbers. A. B. C. D. E. F. G. H. I. J. J. L. M. N. O. P. Q. R. S. T. U. V. W. X/Y/Z.

THE GUIDEBOOK FOR LINEMEN AND CABLEMEN, 2E

Wayne Van Soelen

© 2012, 816pp, Hardback, 9781111035013

ebook



The Guidebook for Linemen and Cablemen, 2nd Edition is the much needed solution to a void that has existed for apprentices seeking to become journeymen linemen and anyone training to work on electrical utility circuits. Packaged as a convenient, single-volume

reference guide on the operation of electrical utility systems, this book will give you what other resources won't: practical coverage of the equipment and situations that power line workers are exposed to on a daily basis, with a focus on ensuring concepts are meaningful and applicable. This book also pays special attention to the order in which topics are addressed; simple concepts are explained first, and the book then builds upon these fundamentals to explain more complex theories, thereby setting a strong foundation for clearly understanding key rules and regulations. This text has been updated to include the most current industry information available, including applications of recent technology. This book also contains in-depth exploration of the mechanical aspects of the job, such as working with rigging, trucks, stringing wire, and tree felling. The need for safety and training is highlighted throughout the book, ultimately giving you a powerful guide for learning the necessary skills to construct, operate, and maintain the lines and cables in an electrical utility system. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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1. Essentials for powerline workers. 2. Electrical units. 3. Electrical power system overview. 4. Substations. 5. Alternating currents. 6. Three-phase circuits. 7. Awareness in an electrical environment. 8. Constructing overhead powerlines. 9. Constructing underground powerlines. 10. Working with conductors and cables. 11. Operating switch gear. 12. Circuit protection. 13. Installing grounds. 14. Transformers. 15. Supplying quality power. 16. Working with aerial devices. 17. Rigging in powerline work. 18. Working it hot. 19. Outdoor lighting. 20. Revenue metering. 21. Tree work.

WIRING

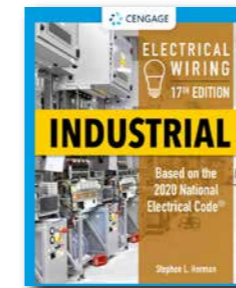
NEW EDITION

ELECTRICAL WIRING INDUSTRIAL, 17E

Stephen L. Herman, Lee College (retired)

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CENGAGE | MINDTAP ebook



With step-by-step guidance and a reader-friendly style, ELECTRICAL WIRING INDUSTRIAL, Seventeenth Edition, helps you gain the basic knowledge and skills you need to safely install wiring systems in an industrial building. Packed with vivid, full-color

photographs and illustrations to help bring key concepts to life, the text also features lots of example problems and detailed solutions that clearly illustrate how important ideas apply to real-world situations. The Seventeenth Edition has been thoroughly updated to reflect the 2020 National Electric Code®, the industry standard for layout and construction of electrical systems. In addition, a set of building blueprints is included to help you connect chapter concepts to realistic industrial building project.

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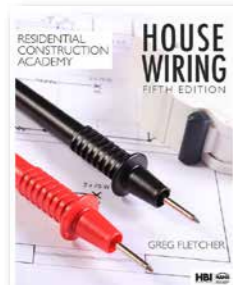
RESIDENTIAL CONSTRUCTION ACADEMY, 5E

House Wiring

Gregory W. Fletcher, *Kennebec Valley Community College*

© 2019, 896pp, Hardback, 9781337402415

 CENGAGE | MINDTAP **ebook**



Gain the knowledge, hands-on skills, and industry insights you need to succeed with this proven guide to the latest and best practices in residential electrical wiring. Completely up to date with the 2017 National Electrical Code® and key Home Builders

Institute (HBI) National Skill Standards, this vividly illustrated, full-color text will give you a thorough grounding in basic residential wiring concepts. In addition, you'll learn about "green" topics such as sustainable building practices and alternative energy systems, as well as practical applications, real-world scenarios, and safety practices you're likely to encounter on the job. With special features to reinforce learning in every chapter, plus helpful print and digital support materials, RESIDENTIAL CONSTRUCTION ACADEMY: HOUSE WIRING, Fifth Edition, is your ideal resource for career success.

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1. Residential Workplace Safety.
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3. Tools Used in Residential Wiring.
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11. Cable Installation.
12. Raceway Installation.
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14. Branch-Circuit Installation.
15. Special Residential Wiring Situations.
16. Video, Voice and Data Wiring

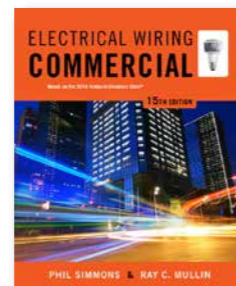
17. Lighting Fixture Installation.
18. Device Installation.
19. Service Panel Trim-Out.
20. Checking Out and Troubleshooting Electrical Wiring Systems.
21. Green Wiring Practices.
22. Solar Photovoltaic (PV) System Installation.

ELECTRICAL WIRING COMMERCIAL, 15E

Phil Simmons, *Simmons Electrical Services*; Ray C. Mullin

© 2015, 624pp, Paperback, 9781285186856

 ebook



Offering the most current coverage available, ELECTRICAL WIRING COMMERCIAL, 15e is completely revised and up to date with the 2014 National Electrical Code®. Extremely reader friendly, the text has long been popular with learners.

Vibrant, full-color illustrations and photographs help you easily grasp difficult concepts. The new edition continues the book's emphasis on newer green technologies and developments within electrical design and installation, including coverage of EV stations in commercial settings. It also offers expansive coverage of safety in the workplace.

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15. Luminaires.
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18. Short-Circuit Calculations and Coordination of Overcurrent Protective Devices.
19. Equipment and Conductor Short-Circuit Protection.
20. Low-Voltage Remote Control.
21. The Cooling System.

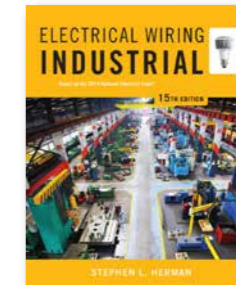
Appendix. Appendix A: Electrical Specifications. Appendix B: Useful Formulas. Appendix C: NEMA Enclosures Types. Appendix D: Outdoor Air Temperatures for Selected U.S. Cities. Appendix E: Metric System of Measurement. Appendix F: Glossary. Appendix G: Web Sites. Appendix H: Electrical Symbols. Glossary. Web Sites. Code Reference Index. Index. Plans for a Commercial Building (Attached to the Inside Back Cover). Sheet A1: Plot Plan, East Elevation, West Elevation. Sheet A2: Architectural Floor Plan: Basement. Sheet A3: Architectural Floor Plan: First Floor. Sheet A4: Architectural Floor Plan: Second Floor. Sheet A5: Elevations: North and South. Sheet A6: Sections: Longitudinal, Transverse. Sheet E1: Electrical Working Drawing: Basement. Sheet E2: Electrical Working Drawing: Entry Level. Sheet E3: Second Floor Electrical Plan. Sheet E4: Panelboard & Service Schedules, One-Line Diag.

ELECTRICAL WIRING INDUSTRIAL, 15E

Stephen L. Herman, *Lee College (retired)*

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ELECTRICAL WIRING INDUSTRIAL, 15E is the complete, step-by-step guide and on-the-job reference tool for wiring industrial buildings according to the current 2014 National Electrical Code®.

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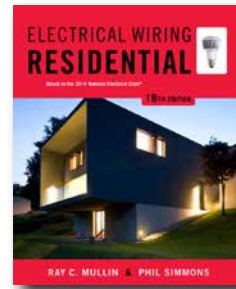
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15. Programmable Logic Controllers.
16. Fiber Optics.
17. Hazardous Locations.
18. Harmonics.

ELECTRICAL WIRING RESIDENTIAL, 18E

Ray C. Mullin; Phil Simmons, Simmons Electrical Services

© 2015, 816pp, Hardback, 9781285170978

ebook



Delivering the very latest in industry standards and procedures, longtime market leader **ELECTRICAL WIRING RESIDENTIAL, 18e** continues to provide comprehensive, authoritative coverage that fully implements the 2014 National Electrical Code®.

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1. General Information for Electrical Installations.
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5. Conductor Identification, Switch Control of Lighting Circuits, Bonding/Grounding of Wiring Devices, Induction Heating.
6. Ground-Fault Circuit Interrupters, Arc-Fault Circuit Interrupters, Transient Voltage Surge Suppressors, Immersion Detection Circuit Interrupters, and Appliance Leakage Current Interrupters.
7. Luminaires, Ballasts, and Lamps.
8. Lighting Branch Circuit for the Front Bedroom.
9. Lighting Branch Circuit for the Master Bedroom.
10. Lighting Branch Circuit--Bathrooms, Hallway.
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12. Lighting Branch Circuit and Small-Appliance Circuits for the Kitchen.
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16. Lighting Branch Circuit for the Garage.
17. Recreation Room.
18. Lighting Branch Circuit, Receptacle Circuits for Workshop.
19. Special-Purpose Outlets--Water Pump, Water Heater.
20. Special-Purpose Outlets

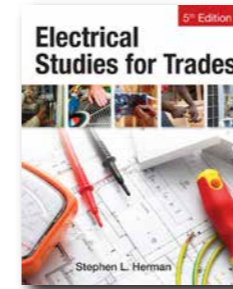
- for Ranges, Counter-Mounted Cooking Unit G, and Wall-Mounted Oven.
21. Special-Purpose Outlets--Food Waste Disposer, Dishwasher.
22. Special-Purpose Outlets for the Bathroom Ceiling Heat/Vent/Lights, the Attic Fan, and the Hydromassage Tub.
23. Special-Purpose Outlets--Electric Heating, Air Conditioning.
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31. Wiring for the Future: Home Automation Systems.
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33. Residential Utility Interactive Photovoltaic Systems. Specifications for Electrical Work--Single-Family Dwelling. Appendix. IAEI Membership Application Form. Key Terms. Web Sites. Index (Code and Subject). Plans for Single-Family Dwelling. Sheet 1 of 10 Basement Plan. Sheet 2 of 10 Floor Plan. Sheet 3 of 10 South (Front) Elevation; Window Schedule, Door Schedule. Sheet 4 of 10 East (Right) Elevation; Interior Elevations. Sheet 5 of 10 North (Rear) Elevation; Plot Plan. Sheet 6 of 10 West (Left) Elevation; Room Finish Schedule. Sheet 7 of 10 Section A-A. Sheet 8 of 10 Electrical Basement Plan. Sheet 9 of 10 Electrical Floor Plan. Sheet 10 of 10 Code Requirements for Swimming Pool Wiring. Blank Floor Plan First Floor. Blank Floor Plan Basement.

ELECTRICAL STUDIES FOR TRADES, 5E

Stephen L. Herman, Lee College (retired)

© 2014, 608pp, Paperback, 9781133278238

ebook



Packed with real-world examples, vivid illustrations, and the latest developments from the field, **ELECTRICAL STUDIES FOR TRADES, 5th EDITION** is ideal for current and future service technicians in air conditioning and refrigeration, construction, and facilities management--and anyone else

who needs a practical knowledge of electricity. Extremely reader-friendly, the book begins with an overview of basic electricity concepts--rather than complex mathematical calculations. From here, you proceed directly to "must-know" information, including how to determine wire sizes and make a variety of common switch connections. Different types of electrical power panels are also examined in detail. Discussion of general wiring practices and circuit protectors, as well as an introduction to transformers and three-phase and single-phase motors, round out the comprehensive coverage.

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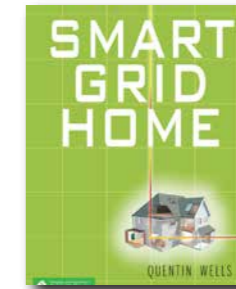
Preface. Unit 1. Atomic Structure. Unit 2. Electrical Quantities, Ohm's Law, and Resistors. Unit 3. Electrical Sources and Static Charges. Unit 4. Magnetism. Unit 5. Series Circuits. Unit 6. Parallel Circuits. Unit 7. Combination Circuits. Unit 8. Measuring Instruments. Unit 9. Alternating Current. Unit 10. Alternating Current Loads. Unit 11. Capacitive Loads. Unit 12. Three-Phase Circuits. Unit 13. Transformers. Unit 14. Three-Phase Transformers. Unit 15. Electrical Services. Unit 16. General Wiring Practices Part 1: Receptacle and Switch Connections. Unit 17. General Wiring Practices Part 2: Protection Circuits, Dimmers, and Chimes. Unit 18. Three-Phase Motors. Unit 19. Single-Phase Motors. Unit 20. Schematics and Wiring Diagrams. Unit 21. Motor Installation.

SMART GRID HOME

Quentin Wells, Salt Lake Community College

© 2013, 544pp, Paperback, 9781111318512

ebook



Practical and reader-friendly, the **SMART GRID HOME** explains how you can adapt and retrofit an existing residence to take advantage of the energy and cost saving technology now available as part of the development of the Smart Grid. Topics covered include

reducing home energy consumption by eliminating heat loss and heat transfer, reducing the power-on time of electronics and other power equipment without loss of convenience, automating home electrical systems to maximize energy conservation, evaluating electrical devices for energy efficiency, developing energy conservation strategies for replacing inefficient appliances, and timing the use of electricity in the home to save both energy and money. Throughout each chapter the information needed to take advantage of utility and government incentive programs to offset some or all of the cost is provided. Coverage also includes the selection and installation of renewable energy source electrical generating systems such as photovoltaic solar generating systems, solar water heating systems, and wind turbine generating systems. In addition, the book describes how these home-based renewable energy systems can be connected to the smart grid so that as a homeowner, you will be paid by the public utility.

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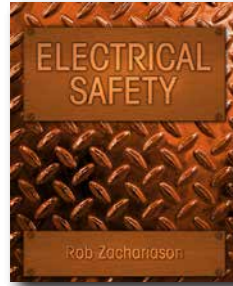
1. Introduction to the Smart Grid.
2. Smart Meters and in Home Displays.
3. Developing a Home Energy Efficiency Plan.
4. Developing a Home Energy Efficiency Plan-- Part 2.
5. Upgrade Home Energy Efficiency by Reducing Heat Transfer.
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7. Energy Efficiency Lighting and Entertainment Systems.
8. Home Automation and Lighting Control.
9. Solar Power for Your Home.
10. Wind Turbine Power for your Home.

ELECTRICAL SAFETY

Rob Zachariason, *Minnesota State Community and Technical College*

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ebook



Can your understanding of electrical safety ever be too thorough? **ELECTRICAL SAFETY** utilizes photographs, line art, and easy to follow language to stress the importance of safety when working around electricity. The text is written through the eyes of an electrical worker to give accurate scenarios of potential hazards such as electric shock and arcing incidents. Details on personal safety, hazardous working conditions and safety organizations such as OSHA and NFPA 70E make this book the perfect choice for beginner electricians.

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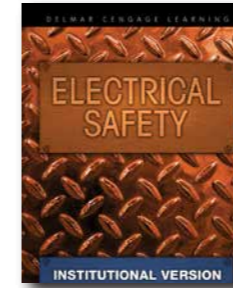
1.Safety Overview. Construction Awareness. Construction Hazards. Cuts. Jewelry. Horseplay. Alcohol and Drugs 2.Safety Organizations, Standards and Certifications Occupational Safety and Health Administration (OSHA). NFPA 70E (Standard for Electrical Safety in the Workplace). National Institute for Occupational Safety and Health (NIOSH). First Aid-CPR-AED 3.Electrical Shock. Electricity and the Human Body. Witnessing a Shock. How to work safely around electricity. Ground Fault Circuit Interrupter (GFCI). 4.Arcing Incident. Arcing Incident. Arc Flash. Arc Blast. Causes of an Arcing incident. Arcing Incident Protection 5.Working on energized equipment. When is it permitted to work on energized equipment? Approach boundaries. Working on energized equipment. Awareness. Personal Protective Equipment. Arcing Flash/Blast Personal Protective Equipment.. Safety signs, barricades, and attendants. 6.Lock Out Tag Out. LOTO and the Safety Plan. Lock out tag out. Restoring Equipment. Lock Out Tag Out Devices. 7.Personal Protective Equipment. Eye and Face

Protection. Head protection. Hearing Protection. Work boots. Work gloves. Respiratory Protection. Fall Protection. 8.Tool and Equipment Safety. Hand Tools. Power Tools. Ladders. Scaffold. Aerial Lift. Machinery Safety 9.Hazardous Working Environments. Hot Environments. Sun. Cold working environments. Confined spaces.

ELECTRICAL SAFETY VIDEO DVD

Delmar

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Viewers will get a first rate introduction to Electrical Safety from this DVD, which allows learners to understand all the most important elements in safety regulations associated with electrical theory. Enhanced with quality animations this DVD includes topics on electrical hazards, electrical shock, arcing incident, personal protective equipment, lock out tag out procedures, safe work practices, proper use of electrical meters, hand tools, power tools and employer responsibility.

CONTENTS

Introduction. Electrical Shock. Arc Flash/Arc Blast. Introduction to Personal Protection Equipment. Fire Resistant (FR) Electrical Rated (ER) Clothing. Hearing and Lung Protection. Lockout/Tagout Procedures. Tools. Meters and Testers. Electrical Safety Program.

INTERPRETING THE NATIONAL ELECTRICAL CODE, 9E

Truman Surbrook, *Michigan State University*; Jonathan Althouse, *Michigan State University*

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ebook



Demystify and accurately interpret the National Electrical Code®! Master all sections of the 2011 National Electrical Code® (NEC®) with the accurate, thorough coverage found only in Surbrook/Althouse's **INTERPRETING THE NATIONAL ELECTRICAL CODE®, 9E**.

This easy-to-understand, trusted text explains all sections of the National Electrical Code using meaningful examples and illustrations that you can readily understand, with valuable insights into all articles of the Code®. Special sections highlight the most important changes from the last version of the Code®, helping you to navigate easily through the new 2011 NEC® requirements. The authors explain each article in detail with thorough discussions, practical examples that illustrate how the Code® is applied, and sample Code® calculations taken from actual field applications. In addition, the authors integrate essential wiring information not directly addressed in the NEC®, but extremely useful in the field. This is a comprehensive, trusted resource you'll reference time and time again throughout your career.

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1. General Wiring and Fundamentals. 2. Wire, Raceway, and Box Sizing. 3. Outlets, Lighting, Appliances, and Heating. 4. Services and Feeder Calculations. 5. Grounding and Bonding. 6. Overcurrent Protection. 7. Motor-Circuit Wiring. 8. Transformers. 9. Hazardous Location Wiring. 10. Health Care Facilities. 11. Emergency and Alternate Power Systems. 12. Industrial Electrical Applications. 13. Commercial Wiring Applications. 14. Special Applications Wiring. 15. Review. Index Including Coding Articles. Annex, Metric Conversion Tables.

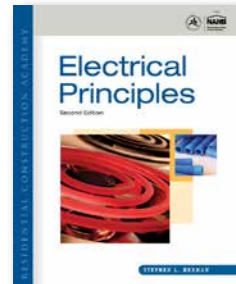
RESIDENTIAL CONSTRUCTION ACADEMY, 2E

Electrical Principles

Stephen L. Herman, Lee College (retired)

© 2012, 320pp, Hardback, 9781111306472

ebook



Through the use of a lively writing style and frequent examples, RESIDENTIAL CONSTRUCTION ACADEMY: ELECTRICAL PRINCIPLES, 2E covers the important topics that you need to know to become a residential electrician. The author, Stephen L. Herman,

logically presents the basic electrical principles from safety to motors and discusses how to go from theory to application. This text helps you learn the work skills, functions and activities included in the Residential Electrician Skill Standards developed by industry leaders for the National Association of Home Builders (NAHB). With its supplemental multimedia this text provides an integrated teaching solution directly linking your education/training program to the residential construction industry.

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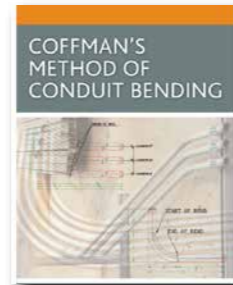
SECTION I: Basic Electricity. 1. Safety. 2. Basic Electrical Theory. 3. Electrical Quantities and Ohm's Law. 4. Resistor. 5. Series Circuits. 6. Parallel Circuits. 7. Combination Circuits. 8. Measuring Instruments. 9. Using Wire Tables and Determining Conductor Sizes. 10. Magnetic Induction. SECTION II: Alternating Current. 11. Alternating Current. 12. Inductance in Alternating Current Circuits. 13. Resistive-Inductive Series Circuits. 14. Resistive-Inductive Parallel Circuits. 15. Capacitors. 16. Single-Phase Transformers. 17. Single-Phase Motors.

COFFMAN'S METHOD OF CONDUIT BENDING

Ronald S. Coffman

© 2009, 192pp, Spiral, 9781435402805

ebook



For the first time, there is a well-organized, comprehensive reference tool for bending conduit - available in both print and CD formats! A trusted and industry-recognized alternative to the currently published material, Coffman's Method of

Conduit Bending offers electricians and electrical students a proven way to install conduit using all types of benders. This widely accepted method has saved many electricians time, effort, and money. To familiarize readers with this methodology, the book begins with an introduction to conduit bending and the associated theories. Coverage then progresses to include coverage of three- and four-point saddles, 90 degree bends, and segment bending. With a print version that is small enough to be stored in a tool kit, and an interactive CD for self-paced learning, this promises to be a valuable resource, both in the field and in the classroom.

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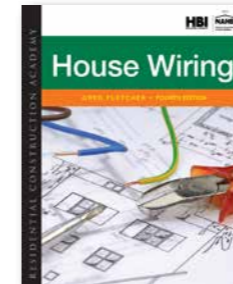
RESIDENTIAL CONSTRUCTION ACADEMY, 4E

House Wiring

Gregory W. Fletcher, Kennebec Valley Community College

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Completely up to date with the 2014 edition of the National Electrical Code, RESIDENTIAL CONSTRUCTION ACADEMY: HOUSE WIRING, 4e delivers the latest and best practices in residential electrical wiring.

This vividly illustrated, full-color text is based on the HBI National Skill Standards that cover the skill sets necessary to achieve a first job in construction or as an electrician. The text provides thorough coverage of "green" topics, sustainable building practices, alternative energy systems, and much more. "From Experience" sections address common residential wiring practices and scenarios, while "Caution" boxes emphasize the ongoing importance of safety. In addition to a hands-on student workbook/lab manual, the text also points the reader to an all-new 3D immersive simulation performance 'game' to help learners prepare for real-world practice.

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1. Residential Workplace Safety. 2. Hardware and Materials Used in Residential Wiring. 3. Tools Used in Residential Wiring. 4. Test and Measurement Instruments Used in Residential Wiring. 5. Understanding Residential Building Plans. 6. Determining Branch Circuit, Feeder Circuit, and Service Entrance Requirements. 7. Introduction to Residential Service Entrances. 8. Service Entrance Equipment and Installation. 9. General Requirements for Rough-In Wiring. 10. Electrical Box Installation. 11. Cable Installation. 12. Raceway Installation. 13. Switching Circuit Installation. 14. Branch-Circuit Installation. 15. Special Residential Wiring Situations. 16. Video, Voice and Data Wiring

Installation. 17. Lighting Fixture Installation. 18. Device Installation. 19. Service Panel Trim-Out. 20. Checking Out and Troubleshooting Electrical Wiring Systems. 21. Green Wiring Practices. 22. Alternative Energy System Installation.

ELECTRONIC TECHNOLOGY

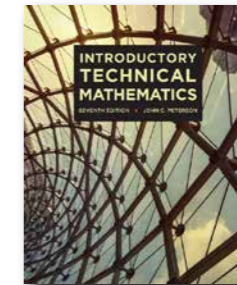
APPLIED MATHEMATICS

INTRODUCTORY TECHNICAL MATHEMATICS, 7E

John Peterson, Chattanooga State Technical Community College (retired); Robert D. Smith, Chattanooga State Technical Community College (retired)

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Considering a career in today's sophisticated trade and technical work environments? This practical, easy-to-understand, and engaging text will help you build a solid understanding of essential math concepts and their real-world

applications using step-by-step examples and problems drawn from a variety of occupations. Now updated with more than 1500 new exercises to introduce and reinforce key skills, INTRODUCTORY TECHNICAL MATHEMATICS, Seventh Edition, also features accurate, up-to-date information from the field, including expanded coverage of topics such as estimation usage, working with spreadsheets on tablets, and energy-efficient electrical applications.

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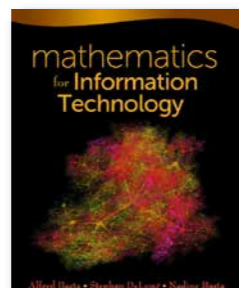
Part I: FUNDAMENTALS OF GENERAL MATHEMATICS. 1. Whole Numbers. 2. Common Fractions. 3. Decimal Fractions. 4. Ratio and Proportion. 5. Percents. 6. Signed Numbers. Part II: MEASUREMENT. 7. Precision, Accuracy, and Tolerance. 8. Customary Measurement Units. 9. Metric Measurement Units. 10. Steel Rules and Vernier Calipers. 11. Micrometers. Part III: FUNDAMENTALS OF ALGEBRA. 12. Introduction to Algebra. 13. Basic Algebraic Operations. 14. Simple Equations. 15. Complex Equations. 16. The Cartesian Coordinate System and Graphs of Linear Equations. 17. Systems of Equations. 18. Quadratic Equations. Part IV: FUNDAMENTALS OF PLANE GEOMETRY. 19. Introduction to Plane Geometry. 20. Angular Measure. 21. Angular Geometric Principles. 22. Triangles. 23. Congruent and Similar Figures. 24. Polygons. 25. Circles. Part V: GEOMETRIC FIGURES: AREAS AND VOLUMES. 26. Areas of Common Polygons. 27. Areas of Circles, Sectors, Segments, and Ellipses. 28. Prisms and Cylinders: Volumes, Surface Areas, and Weights. 29. Pyramids and Cones: Volumes, Surface Areas, and Weights. 30. Spheres and Composite Figures: Volumes, Surface Areas, and Weights. Part VI: BASIC STATISTICS. 31. Graphs: Bar, Circle, and Line. 32. Statistics. Part VII: FUNDAMENTALS OF TRIGONOMETRY. 33. Introduction to Trigonometric Functions. 34. Trigonometric Functions with Right Triangles. 35. Practical Applications with Right Triangles. 36. Functions of Any Angle, Oblique Triangles. 37. Vectors. Appendix A: United States Customary and Metric Units of Measure. Appendix B: Formulas for Areas (A) of Plane Figures. Appendix C: Formulas for Volumes and Areas of Solid Figures. Appendix D: Answers to Odd-Numbered Exercises.

MATHEMATICS FOR INFORMATION TECHNOLOGY

Alfred Basta; Stephan DeLong; Nadine Basta

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MATHEMATICS FOR INFORMATION TECHNOLOGY delivers easy-to-understand and balanced mathematical instruction. Each chapter begins with an application, goes on to present the material with examples, and closes with a summary of

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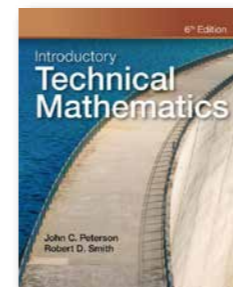
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INTRODUCTORY TECHNICAL MATHEMATICS, 6E

John Peterson, Chattanooga State Technical Community College (retired); Robert D. Smith, Chattanooga State Technical Community College (retired)

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With an emphasis on real-world math applications, the Sixth Edition of INTRODUCTORY TECHNICAL MATHEMATICS is essential for anyone considering a career in today's sophisticated trade and technical work

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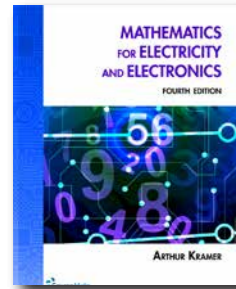
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MATH FOR ELECTRICITY & ELECTRONICS, 4E

Dr. Arthur Kramer, New York City College of Technology

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With its fresh reader-friendly design, **MATHEMATICS FOR ELECTRICITY AND ELECTRONICS, 4E** is more current, comprehensive, and relevant than ever before. Packed with practical exercises and examples, it equips you with a thorough understanding

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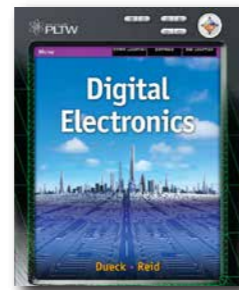
DIGITAL ELECTRONICS

DIGITAL ELECTRONICS

Robert Dueck, Red River College; Ken Reid, Ohio Northern University

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DIGITAL ELECTRONICS is your all-in-one guide to the exciting world of digital electronics, from basic electrical theory and digital logic to hands-on, high-tech applications. Designed to support Project Lead the Way®'s (PLTW) innovative Digital Electronics (DE)

course, this dynamic text prepares you for college and career success in STEM, (Science, Technology, Engineering, and Math). The text introduces key concepts such as electrical shop practices and electrical theory, lets you build confidence by exploring key principles and applying what you learn, and helps you develop strong skills in circuit analysis, design, and troubleshooting. A wealth of examples and exercises are included to support your learning, and many feature Multisim™ integration to help you visualize and analyze circuits—including combinational and sequential circuits—before you construct them. Other proven learning tools are provided to make mastering the material easier, including self-check problems in every chapter, “Bring it Home” questions covering the basics, and challenging “Extra Mile” problems to help you deepen your understanding and hone your skills. **DIGITAL ELECTRONICS** is an ideal choice to support your STEM success!

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DIGITAL ELECTRONICS, INTERNATIONAL EDITION

Robert Dueck, Red River College; Ken Reid, Ohio Northern University

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DIGITAL ELECTRONICS, International Edition is your all-in-one guide to the exciting world of digital electronics, from basic electrical theory and digital logic to hands-on, high-tech applications. Designed to support Project Lead the Way®'s (PLTW) innovative

Digital Electronics (DE) course, this dynamic text prepares you for college and career success in STEM, (Science, Technology, Engineering, and Math). The text introduces key concepts such as electrical shop practices and electrical theory, lets you build confidence by exploring key principles and applying what you learn, and helps you develop strong skills in circuit analysis, design, and troubleshooting. A wealth of examples and exercises are included to support your learning, and many feature Multisim™ integration to help you visualize and analyze circuits—including combinational and sequential circuits—before you construct them. Other proven learning tools are provided to make mastering the material easier, including self-check problems in every chapter, “Bring it Home” questions covering the basics, and challenging “Extra Mile” problems to help you deepen your understanding and hone your skills. DIGITAL ELECTRONICS is an ideal choice to support your STEM success!

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ELECTRONIC COMMUNICATIONS

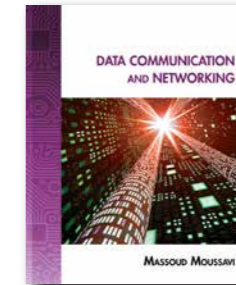
DATA COMMUNICATION AND NETWORKING

A Practical Approach

Massoud Moussavi

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Data Communication and Networking, First Edition provides a solid, thorough overview of data communications and networking for Engineering Technology programs. This text covers information for one or more courses spanning digital

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ELECTRONIC DEVICES

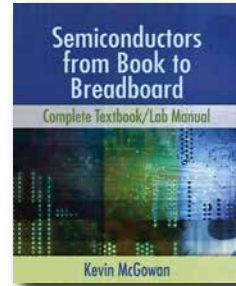
SEMICONDUCTORS

From Book to Breadboard

Kevin McGowan, Remington College, Lafayette, Louisiana

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A user-friendly, hands-on approach to understanding solid-state devices, SEMICONDUCTORS FROM BOOK TO BREADBOARD: COMPLETE TEXTBOOK/LAB MANUAL, 1ST Edition centers on the concepts and skills you need to become a skilled electronics technician.

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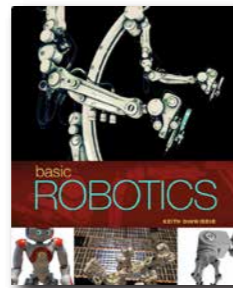
INDUSTRIAL ELECTRONICS/MANUFACTURING TECHNOLOGY

BASIC ROBOTICS

Keith Dinwiddie, Ozarks Technical Community College

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With no previous experience required, BASIC ROBOTICS walks you step by step through the fundamentals of the industrial robot system. It begins with an exploration of the fascinating technological history that led to the modern robot,

starting with events from Before the Common Era and ending with a glimpse of what the robots of tomorrow might become. From there the text explores safety, various parts of the robot, tooling, power transmission systems, the basics of programming, troubleshooting, maintenance, and much more. Engaging photos highlight various robotic systems and their parts, while stories of real-world events bring text concepts to life. This innovative First Edition incorporates many of the initiatives of STEM and is the culmination of lessons learned from the author's years of teaching robotics in various formats—from the traditional classroom to the industrial production floor with systems ranging from the LEGO Mindstorms NXT to the FANUC robot.

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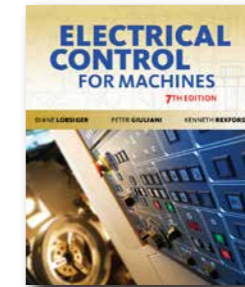
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ELECTRICAL CONTROL FOR MACHINES, 7E

Diane Lobsiger, Delta College

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Reflecting the latest trends and practices from industry, the cutting-edge new ELECTRICAL CONTROLS FOR MACHINES, 7e delivers a thorough introduction to the range of technologies found in today's electrical machine controls. Completely up to

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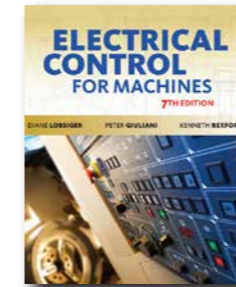
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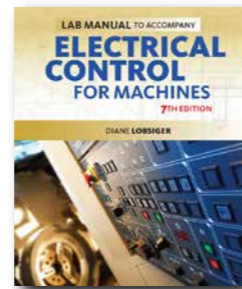
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LAB MANUAL FOR LOBSIGER'S ELECTRICAL CONTROL FOR MACHINES, 7TH, 7E

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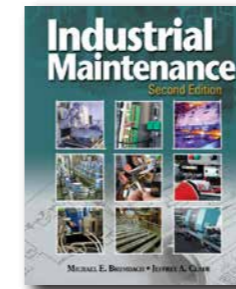
The Laboratory Manual is a valuable tool designed to enhance your lab experience. Lab activities, objectives, materials lists, step-by-step procedures, illustrations, and review questions are commonly found in a Lab Manual.

INDUSTRIAL MAINTENANCE, 2E

Michael E. Brumbach, York Technical College, Rock Hill, South Carolina; Jeffrey A. Clade, York Technical College, Rock Hill, South Carolina

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INDUSTRIAL MAINTENANCE, Second Edition, provides a strong foundation in all five major areas of industrial maintenance, including general, mechanical, electrical, welding, and preventive maintenance. In addition to essential

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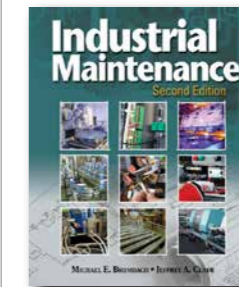
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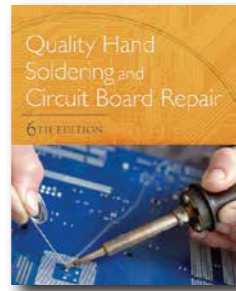
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QUALITY HAND SOLDERING AND CIRCUIT BOARD REPAIR, 6E

H. (Ted) Smith

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Straightforward and easy to understand, the Sixth Edition of Quality Hand Soldering and Circuit Board Repair has been thoroughly revised to provide you with the most up to date information in the industry. Focusing on the production and repair of circuit boards,

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1. General Soldering Information. 2. Soldering Techniques. 3. Stripping and Tinning Stranded Wires. 4. Installing and Soldering Tinned Wires. 5. Components-Through Hole Mount (THM). 6. Components-Surface Mount Technology (SMT). 7. Desoldering-THM and SMT. 8. Evaluation. 9. Conformal Coatings and Solder Masks. 10. Pad and Track Repairs. 11. Run/Track/Trace Repairs. 12. Burn Repairs. 13. Edge Connectors/Fingers. 14. Modifications. Glossary.

QUICK START TO PROGRAMMING ALTERNATIVE CONTROLLOGIX LANGUAGES

Jon Stenerson, Fox Valley Technical College, Appleton, Wisconsin

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QUICK START TO PROGRAMMING ALTERNATIVE CONTROLLOGIX LANGUAGES, 1E is a practical, easy to understand, step-by-step book that covers such ControlLogix alternative languages as Structured

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1. Project Organization and Addressing. 2. Structured Text Programming. 3. Sequential Function Chart Programming. 4. Function Block Programming. 5. Add-On Instructions.

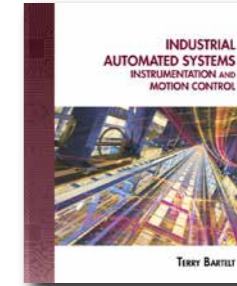
INDUSTRIAL AUTOMATED SYSTEMS

Instrumentation and Motion Control

Terry L. M. Bartelt, Fox Valley Technical College.

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INDUSTRIAL AUTOMATED SYSTEMS: INSTRUMENTATION AND MOTION CONTROL, will provide you with state-of-the art coverage of the full spectrum of industrial maintenance and control, from servomechanisms to instrumentation. You will

learn about components, circuits, instruments, control techniques, calibration, tuning and programming associated with industrial automated systems. INDUSTRIAL AUTOMATED SYSTEMS: INSTRUMENTATION AND MOTION CONTROL, focuses on operation, rather than mathematical design concepts. It is formatted into sections so that it can be used in a variety of courses, such as electrical motors, sensors, variable speed drives, programmable logic controllers, servomechanisms, and various instrumentation and process classes. This book also offers you a broader coverage of industrial maintenance and automation information than other books and provides you with a more extensive collection of supplements, including a lab manual and two hundred animated multimedia lessons on a CD.

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SECTION I: INDUSTRIAL CONTROL OVERVIEW. 1. Introduction to Industrial Control Systems Introduction. SECTION II: INTERFACING DEVICES. 2. Interface Devices Introduction. 3. Thyristors Introduction. SECTION III: THE CONTROLLER. 4. Introduction. Control Modes. On-Off Control. Proportional Control. Proportional- SECTION IV: ELECTRIC MOTORS. 5. DC Motors. 6. AC Motors. 7. Servo Motors. SECTION V: VARIABLE SPEED DRIVES. 8. DC Drives. 9. AC Variable Speed Drive. SECTION VI: PROCESS ONCTROL AND

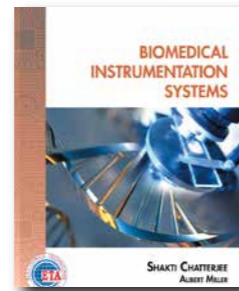
INSTRUMENTATION. 10. Pressure Systems. 11. Temperature Control. 12. Flow Control. 13. Level Control Systems. 14. Analytical Instrumentation. 15. Industrial Process Techniques and Instrumentation. 16. Instrumentation Symbology. 17. Process Control Methods. 18. Instrument Calibration and Controller Tuning. SECTION VII: DETECTION SENSORS. 19. Industrial Detection Sensors and Interfacing Introduction. 20. Industrial Wireless Technologies. SECTION VIII: PROGRAMMABLE CONTROLLERS. 21. Introduction to Programmable Controllers. 22. Fundamental PLC Programming. 23. Advanced Programming, PLC Interfacing, and Troubleshooting. SECTION IX: MOTION CONTROL. 24. Elements of Motion Control. 25. Motion Control Feedback Devices. 26. Fundamentals of Servomechanisms. SECTION X: INDUSTRIAL NETWORKS. 27. Industrial Networking. 28. (On book CD) Industrial Applications.

BIOMEDICAL INSTRUMENTATION SYSTEMS

Shakti Chatterjee, DeVry Columbus; Aubert Miller

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Learn to maintain and repair the high tech hospital equipment with this practical, straightforward, and thorough new book. Biomedical Instrumentation Systems uses practical medical scenarios to illustrate effective equipment maintenance

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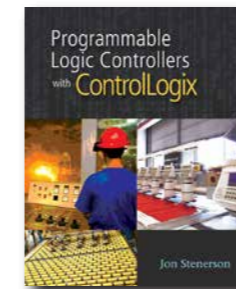
Introduction to Biomedical Instrumentation Systems
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Biomedical Electronics: Analog Biomedical Electronics: Digital Biomedical Electrodes, Sensors and Transducers Instrumentation in Diagnostic Cardiology Defibrillators and Pacemakers Instrumentation in Blood Circulation Instrumentation in Extracorporeal Circulation and Assist Devices Instrumentation in Respiration Electroencephalography & EMG Instrumentation Artifacts and Noise in Medical Instrumentation Instrumentation in Medical Ultrasound Instrumentation in Medical Imaging Fiber Optics and Lasers in Bioinstrumentation Instruments in ICU / CCU Instrumentation in the Operating Room Biomedical Laboratory Instrumentation Medical Safety Regulation & Standards Preventative Maintenance Computers and Telemedicine New Technologies in Medical Instrumentation

PROGRAMMABLE LOGIC CONTROLLERS WITH CONTROLLOGIX

Jon Stenerson, Fox Valley Technical College, Appleton, Wisconsin

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PROGRAMMING CONTROLLOGIX PROGRAMMABLE AUTOMATION CONTROLLERS strength is its breadth and depth of coverage, taking the reader from an overview of the Programmable Logic

Controllers through ladder logic, structured text, sequential function chart, and function block programming. To aid in learning, the book features a DVD with Camtasia learning videos and explanations of setup of RSLinx, project development, tag creation, configuration, instructions and much more. Students learn more and more easily because of the breadth of practical coverage, numerous examples and extensive exercises.

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MICROPROCESSORS/MICROCONTROLLERS

MICROCONTROLLERS, 2E

From Assembly Language to C Using the PIC24 Family

Robert B. Reese; J.W. Bruce; Bryan A. Jones

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This completely updated second edition of MICROCONTROLLERS: FROM ASSEMBLY LANGUAGE TO C USING THE PIC24 FAMILY covers assembly language, C programming, and hardware interfacing for the Microchip PIC24 family, a recently

updated microcontroller family from Microchip. Hardware interfacing topics include parallel port usage, analog-to-digital conversion, digital-to-analog conversion, the serial peripheral bus (SPI), the inter-integrated circuit bus (I2C), asynchronous serial communication, and timers. Assembly language programming is covered in the context of the PIC24 instruction set, and no initial knowledge of assembly language programming is assumed. Specific hardware interfacing topics covered are parallel IO, analog-to-digital/digital-to-analog conversion, pulse width modulation, timer usage for IO polling, and industry standard serial interface standards. Interfacing examples include external devices such as pushbutton switches, LEDs, serial EEPROMs, liquid crystal displays (LCDs), keypads, rotary encoders, external digital-to-analog converters, DC motors, servos, temperature sensors, and IR receivers. Master the PIC24 family with MICROCONTROLLERS: FROM ASSEMBLY LANGUAGE TO C USING THE PIC24 FAMILY.

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Introduction. PART 1: DIGITAL LOGIC REVIEW AND COMPUTER ARCHITECTURE FUNDAMENTALS. 1. Number System and Digital Logic Review. 2. The Stored Program Machine. PART 2: PIC24 MC ASSEMBLY LANGUAGE PROGRAMMING. 3. Introduction to the PIC24 Microcontroller Family. 4. Unsigned 8/16-bit Arithmetic, Logical, Conditional Operations. 5. Extended Precision and Signed Data Operations. 6. Pointers and Subroutines. PART 3: PIC24 MC INTERFACING USING THE C LANGUAGE. 7. The PIC24EPJ256GP202: System Startup and Parallel Port I/O. 8. Interrupts and a First Look at Timers. 9. Asynchronous and Synchronous Serial I/O. 10. Data Conversion. 11. Timers. 12. Advanced Hardware Topics. 13. Operating Systems for Embedded Systems. Appendix A: PIC24 Architecture and Instruction Set Summary. Appendix B: Circuits 001. Appendix C: References. Appendix D: Problem Solutions. Index.

THE HCS12 / 9S12, 2E

An Introduction to Software and Hardware Interfacing
Han-Way Huang, Minnesota State University, Mankota

© 2010, 928pp, Hardback, 9781435427426

ebook



This new book provides a total solution for learning and teaching embedded system design based on the Freescale HCS12/9S12 microcontroller. Readers will learn step-by-step how to program the HCS12 using both assembly and C languages, as well as how

to use such development tools as CodeWarrior, ImageCraft ICC12, MiniIDE, GNU C, and EGNU IDE. Supportive examples clearly illustrate all applications of the HCS12 peripheral functions, including parallel port, timer functions, PWM, UART port, SPI, I2C, CAN, on-chip flash and EEPROM programming, external memory expansion, and more. New sections on C programming style, software development methodology, and software reuse have been added in this revision. A back-of-book CD contains the source code for all examples in the book, several groups of reusable utility functions, and complimentary freeware development tools for improved learning.

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Appendices. A. Instruction Set Reference. B. Summary Features of HCS12 Devices. C. Tutorial for Using the AsmlIDE. D. MC9S12DP256 Registers. E. Music Note Frequencies. References. Index.

NETWORKING

NETWORK+ GUIDE TO NETWORKS (WITH PRINTED ACCESS CARD), 6E

Tamara Dean

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The completely updated NETWORK+ GUIDE TO NETWORKS, 6th Edition gives students the technical skills and industry know-how required to begin an exciting career installing, configuring, and troubleshooting computer networks.

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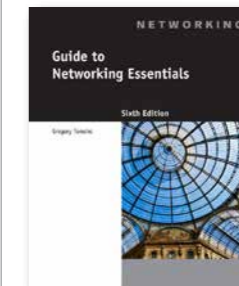
An Introduction to Networking. Networking Standards and the OSI Model. Transmission Basics and Networking Media. Introduction to TCP/IP Protocols. Topologies and Ethernet Standards. Network Hardware, Switching, and Routing. Wide Area Networks. Wireless Networking. In-Depth TCP/IP Networking. Virtual Networking and Remote Access. Network Security. Voice and Video Over IP. Troubleshooting Network Problems. Ensuring Integrity and Availability. Network Management. Appendix A: Network+ Examination Objectives. Appendix B: Network+ Practice Exam. Appendix C: Visual Guide to Connectors. Appendix D: Network Operating Systems.

GUIDE TO NETWORKING ESSENTIALS, 6E

Greg Tomsho, Yavapai College

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GUIDE TO NETWORKING ESSENTIALS provides both the knowledge and hands-on skills necessary to work with network operating systems in a network administration environment by focusing on troubleshooting and not on an exam, therefore offering

a comprehensive introduction to Networking and to advances in software, wireless and network security.

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1. Introduction to Computer Networks. 2. Network Hardware Essentials. 3. Network Topologies and Technologies. 4. Networking Media. 5. Network Protocols. 6. Network Reference Models and Standards. 7. Network Hardware in Depth. 8. Network Operating Systems. 9. Introduction to Network Security. 10. Supporting a Small Business Network. 11. Network Administration and Support. 12. Enterprise and Wide Area Networks. 13. Solving Network Problems. Appendix A. Common Networking Standards. Appendix B. Old or Obsolete Technologies. Appendix C. Planning and Implementing Networks. Needs Assessment and Justification. Establish the Need for a Network. Network Plan. Appendix D. Network Troubleshooting Guide. Appendix E. Networking Resources, Online and Offline. Appendix F. A Guide to Using Virtualization in the Classroom.

NETWORK+ GUIDE TO NETWORKS, 5E

Tamara Dean

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Knowing how to install, configure, and troubleshoot a computer network is a highly marketable and exciting skill. This book first introduces the fundamental building blocks that form a modern network, such as protocols, topologies, hardware, and network

operating systems.

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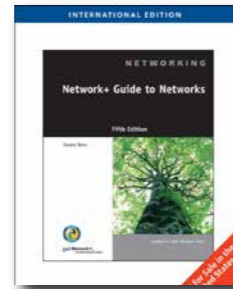
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NETWORK+ GUIDE TO NETWORKS, INTERNATIONAL EDITION, 5E

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Knowing how to install, configure, and troubleshoot a computer network is a highly marketable and exciting skill. Network+ Guide to Networks, International Edition first introduces the fundamental building blocks that form a modern network, such as

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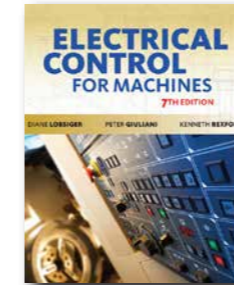
PROGRAMMABLE LOGIC CONTROLLERS

ELECTRICAL CONTROL FOR MACHINES, 7E

Diane Lobsiger, Delta College

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Reflecting the latest trends and practices from industry, the cutting-edge new ELECTRICAL CONTROLS FOR MACHINES, 7e delivers a thorough introduction to the range of technologies found in today's electrical machine controls. Completely up to

date, circuit diagrams and the descriptions of the circuits illustrate a modern representation of the controls circuits. The text also offers expansive coverage of the power and control circuitry required to operate electrical machinery. While it discusses the trend away from relay control to PLC control, the text maintains solid coverage of relay circuits. Its emphasis on the critical importance of worker and equipment safety in industrial settings includes a detailed explanation of the risk assessment process and a safety relay circuit. In addition, the inclusion of international equipment specifications reflects the dramatic impact of globalization and integration of businesses on the way industries function.

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SWITCHES, AND CIRCUIT BREAKERS Protective Factors. Fuse Construction and Operation. Fuse Types. Peak Let-Thru Current (IP) and Ampere Squared Seconds (I²t). Voltage and Frequency Surges. Circuit Breaker Types. Programmable Motor Protection. Electrical Metering and Voltage Protection. Selecting Protective Devices. Ground Fault Circuit Interrupter. 3. CONTROL UNITS FOR SWITCHING AND COMMUNICATION. Oil-Tight Units. Push-Button Switches. Selector Switches. Heavy-Duty Switches. Indicating Lights. General Information on Oil-Tight Units. Circuit Applications. Annunciators. Light-Emitting Diodes. Membrane Switches. 4. RELAYS. Control Relays and Their Uses. Timing Relays. Latching Relays. Plug-In Relays. Contactors. 5. SOLENOIDS. Solenoid Action. Solenoid Force and Voltage. Low Voltage. Overvoltage. AC Solenoids on DC. DC Solenoids on AC. 50- and 60-Cycle Solenoids. Solenoid Temperature Rise. Valve Operation. Circuit Applications. Variable Solenoids. Proportional Valves. Servo Valves. 6. TYPES OF CONTROL. Open-Loop Control. Closed-Loop Control. Proportional Control. Proportional-Integral. Proportional-Integral-Derivative. 7. MOTION CONTROL DEVICES. Importance of Position Indication and Control. Limit Switches-Mechanical. Limit Switch Symbols. Circuit Applications. Proximity Limit Switches. LED Indicators. Solid-State Outputs. Detection Range. Hysteresis. Attenuation Range. Speed. Magnet-Operated Limit Switch. Vane Switches. Linear Position Displacement Transducers. Angular Position Displacement Transducers. Use of AC Synchronous and DC Stepping Motors. Servo Positioning Control. Sensing Theory. Flow Sensors. 8. PRESSURE CONTROL. Importance of Pressure Indication and Control. Types of Pressure Switches. Circuit Applications. 9. TEMPERATURE CONTROL. Importance of Temperature Indication and Control. Selection of Temperature Controllers. Electronic Temperature Controller (Pyrometer). Controller Outputs. Additional Terms. Temperature Switches (Thermostats). Temperature Sensors. Circuit Applications. 10. TIME CONTROL. Selected Operations. Types of Timers. Synchronous Motor-Driven Timers. Solid-State Timers. Circuit Applications. 11. COUNT

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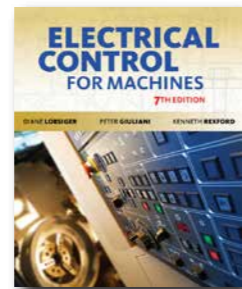
CONTROL SYSTEMS FOR EASY MAINTENANCE. Design Considerations. Diagrams and Layouts. Locating, Assembling, and Installing Components.

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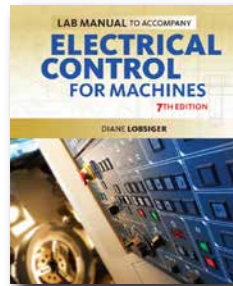
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LAB MANUAL FOR LOBSIGER'S ELECTRICAL CONTROL FOR MACHINES, 7TH, 7E

Diane Lobsiger, Delta College

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The Laboratory Manual is a valuable tool designed to enhance your lab experience. Lab activities, objectives, materials lists, step-by-step procedures, illustrations, and review questions are commonly found in a Lab Manual.

INTRODUCTION TO THE CONTROLLOGIX PROGRAMMABLE AUTOMATION CONTROLLER WITH LABS, 2E

Gary Dunning, Hennepin Technical College

© 2014, 288pp, Paperback, 9781111539290

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INTRODUCTION TO THE CONTROLLOGIX PROGRAMMABLE AUTOMATION CONTROLLER USING RSLINX 5000 SOFTWARE: WITH LABS, 4E helps you master ControlLogix software with ease. Using its signature

hands-on lab exercises for Programmable Logic Controllers, this versatile guide takes you step-by-step through RSLogix 5000 software from hardware configuration, to programming basic instructions and features, to RSLinx communications. Plus, this edition features manufacturer-specific illustrations and RSLogix screenshots to teach key concepts.

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1. Introduction to ControlLogix Hardware.
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5. Understanding ControlLogix I/O Addressing.
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7. CompactLogix I/O Configuration.
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17. Introduction to Function Block.
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20. Configuring an RSLinx Serial Driver Using a Rockwell Automation 9300-USBS USB to

- Serial Adapter.
21. Installing and Configuring a USB Driver for 1756-L7 Series Controllers.
22. Determine and Modify a Personal Computer IP address.
23. Determine and Modify a Modular ControlLogix Ethernet IP Address.
24. Determine and Modify a 1769-CompactLogix Ethernet IP Address.
25. Configuring a 1756-ENET Ethernet using RSLinx.
26. Configuring Ethernet/IP Drivers using RSLinx.
27. Configuring CompactLogix 1769-L23E, 1769-L32E, or 1769-L35E Ethernet /IP Driver using RSLinx Software.
28. Configuring an USB Driver for an Ethernet Communications Module.

QUICK START TO PROGRAMMING ALTERNATIVE CONTROLLOGIX LANGUAGES

Jon Stenerson, Fox Valley Technical College, Appleton, Wisconsin

© 2012, 192pp, Paperback, 9781111309718

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QUICK START TO PROGRAMMING ALTERNATIVE CONTROLLOGIX LANGUAGES, 1E is a practical, easy to understand, step-by-step book that covers such ControlLogix alternative languages as Structured

Text, Sequential Function Chart, and Function Block languages. Additional tutorials are also available through the online companion site. This additional content features Camtasia learning videos and explanations of setup of RSLinx, project development, tag creation, configuration, instructions, examples of each language, and much more. The chapter questions will help you understand each language and Add-On instructions.

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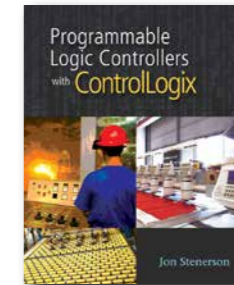
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Jon Stenerson, Fox Valley Technical College, Appleton, Wisconsin

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14. Risk Assessment

and Safety. 15. Risk Reduction and Safety Devices. 16. Installation and Troubleshooting. 17. Lockout/Tagout. Appendix A - Starting a New Project. Appendix B - Configuring I/O Modules in a Remote Chassis. Appendix C - The Use of Producer/Consumer Tags. Appendix D - ControlLogix Messaging. Appendix E - Configuring ControlLogix for Motion.

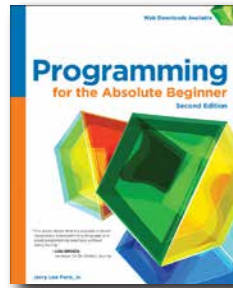
PROGRAMMING

PROGRAMMING FOR THE ABSOLUTE BEGINNER, 2E

Jerry Lee Ford Jr.

© 2016, 394pp, Paperback, 9781305504431

ebook



Are you interested in learning to program computers? PROGRAMMING FOR THE ABSOLUTE BEGINNER, SECOND EDITION is a friendly guide that will teach you the fundamentals of computer programming through the hands-on (and fun!) development of computer games. This book teaches programming using Just BASIC, a free, easy-to-learn software that lets you create programs for computers running Windows. Popular author and educator Jerry Ford, Jr., teaches you fundamental programming principles and gives you a broad view of computer programming and its many possibilities. As you work through this book, you will not only learn the basics of programming, but you'll also build a foundation from which you can advance into other programming languages with confidence. Get started programming today with PROGRAMMING FOR THE ABSOLUTE BEGINNER, SECOND EDITION.

CONTENTS

Introduction. Part 1: INTRODUCTION TO COMPUTER PROGRAMMING. 1. Introduction to Programming. 2. Creating Programs with JustBASIC. 3. Creating Graphical User Interfaces. Part 2: LEARNING HOW TO WRITE BASIC PROGRAMS. 4. Working with Variables and Arrays. 5. Making Decisions with Conditional Logic. 6. Using Loops to Process Data. 7. Improving Program Organization with Functions and Subroutines. Part 3: ADVANCED PROGRAMMING TOPICS. 8. Working with Text Files. 9. Working with Sound and Graphics. 10. Arcade-Style Computer Game Development. 11. Debugging Your Applications. Part 4: APPENDICES. Appendix A: What's on the Companion Website? Appendix B: What's Next? Glossary. Index.

REFERENCE

THE BUSINESS ANALYST'S HANDBOOK

Howard Podeswa

© 2009, 432pp, Paperback, 9781598635652

ebook



The Business Analyst (BA) plays an important role as liaison between business stakeholders and the technical team (software developers, vendors, etc.), ensuring that business needs are reflected in any software solution. Despite the importance of the job, there is currently no book specifically designed as a comprehensive reference manual for the working BA. The Business Analyst's Handbook solves this problem by providing a useful compendium of tools, tables, lists, and templates that BAs can use on-the-job to carry out their tasks. For example, you might be preparing for an interview session and use the book's checklist of interviewees to verify

whether there is appropriate coverage of business stakeholders. Or you might be asked to review some diagrams and refer to the Glossaries of Symbols (organized by diagram type) for guidance. Or you may be asked to prepare textual requirements documentation and refer to the Business Requirement template for a list of artifacts and table of contents. Whatever your BA needs, the Business Analyst's Handbook places the necessary information right at your fingertips.

CONTENTS

Introduction; Chapter 1: Overview of BA Activities Throughout the Life Cycle; Chapter 2: Meeting Guide; Chapter 3: Standards and Guidelines Used in This Book; Chapter 4: BA Toolkit; Chapter 5: Tips and Checklists; Chapter 6: Templates; Appendix A: Glossary of BA Terms; Appendix B: Acronyms; Appendix C: Further Reading

SIGNAL PROCESSING

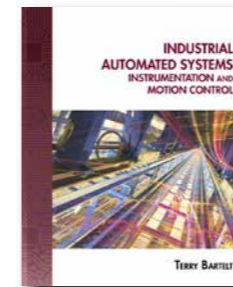
INDUSTRIAL AUTOMATED SYSTEMS

Instrumentation and Motion Control

Terry L. M. Bartelt, Fox Valley Technical College.

© 2011, 720pp, Hardback, 9781435488885

ebook



INDUSTRIAL AUTOMATED SYSTEMS: INSTRUMENTATION AND MOTION CONTROL, will provide you with state-of-the-art coverage of the full spectrum of industrial maintenance and control, from servomechanisms to instrumentation. You will learn about components, circuits, instruments, control techniques, calibration, tuning and programming associated with industrial automated systems. INDUSTRIAL AUTOMATED SYSTEMS: INSTRUMENTATION AND MOTION CONTROL, focuses on operation, rather than mathematical

design concepts. It is formatted into sections so that it can be used in a variety of courses, such as electrical motors, sensors, variable speed drives, programmable logic controllers, servomechanisms, and various instrumentation and process classes. This book also offers you a broader coverage of industrial maintenance and automation information than other books and provides you with a more extensive collection of supplements, including a lab manual and two hundred animated multimedia lessons on a CD.

CONTENTS

SECTION I: INDUSTRIAL CONTROL OVERVIEW. 1. Introduction to Industrial Control Systems Introduction. SECTION II: INTERFACING DEVICES. 2. Interface Devices Introduction. 3. Thyristors Introduction. SECTION III: THE CONTROLLER. 4. Introduction. Control Modes. On-Off Control. Proportional Control. Proportional- SECTION IV: ELECTRIC MOTORS. 5. DC Motors. 6. AC Motors. 7. Servo Motors. SECTION V: VARIABLE SPEED DRIVES. 8. DC Drives. 9. AC Variable Speed Drive. SECTION VI: PROCESS ONCTROL AND INSTRUMENTATION. 10. Pressure Systems. 11. Temperature Control. 12. Flow Control. 13. Level Control Systems. 14. Analytical Instrumentation. 15. Industrial Process Techniques and Instrumentation. 16. Instrumentation Symbology. 17. Process Control Methods. 18. Instrument Calibration and Controller Tuning. SECTION VII: DETECTION SENSORS. 19. Industrial Detection Sensors and Interfacing Introduction. 20. Industrial Wireless Technologies. SECTION VIII: PROGRAMMABLE CONTROLLERS. 21. Introduction to Programmable Controllers. 22. Fundamental PLC Programming. 23. Advanced Programming, PLC Interfacing, and Troubleshooting. SECTION IX: MOTION CONTROL. 24. Elements of Motion Control. 25. Motion Control Feedback Devices. 26. Fundamentals of Servomechanisms. SECTION X: INDUSTRIAL NETWORKS. 27. Industrial Networking. 28. (On book CD) Industrial Applications.

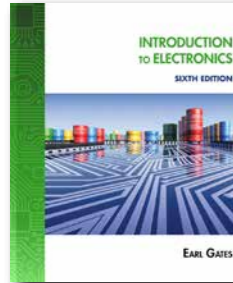
SURVEY OF ELECTRONICS

INTRODUCTION TO ELECTRONICS, 6E

Earl Gates, Charlotte Valley Central School, Davenport, New York, Building Principal

© 2012, 544pp, Hardback, 9781111128531

ebook



INTRODUCTION TO ELECTRONICS, SIXTH EDITION provides you with a broad overview of both the linear and digital fields of electronics while also providing the basics so you can understand the fundamentals of electronics.

This book will stimulate your interest in electronics and will provide you with a fundamental background in electronics that you need to succeed in today's increasingly digital world. The sixth edition continues to expose you to the broad field of electronics at a level you can easily understand. Chapters are brief and focused and frequent examples are used to show math and formulas in use. Each chapter builds on the previous chapter to allow you to grow with the knowledge necessary to continue. There are many new problems and review questions and Internet applications that enhance your learning and retention of the material. In addition, new photographs keep you up to date with changes in the field of electronics and a new topic on Programmable Interface Controllers (PICs) is included as well. INTRODUCTION TO ELECTRONICS, SIXTH EDITION is written to allow you to fully comprehend the fundamentals of electronics.

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Circuits. 15. Capacitive AC Circuits. 16. Inductive AC Circuits. 17. Resonance Circuits. 18. Transformers. Part III: SEMICONDUCTOR DEVICES 181. 19. Semiconductor Fundamentals. 20. PN Junction Diodes. 21. Zener Diodes. 22. Bipolar Transistors. 23. Field Effect Transistors (FETs). 24. Thyristors. 25. Integrated Circuits. 26. Optoelectric Devices. Part IV: LINEAR ELECTRONIC CIRCUITS. 27. Power Supplies. 28. Amplifier Basics. 29. Amplifier Applications. 30. Oscillators. 31. Waveshaping Circuits. Part V: DIGITAL ELECTRONIC CIRCUITS 313. 32. Binary Number System. 33. Basic Logic Gates. 34. Simplifying Logic Circuits 330. 35. Sequential Logic Circuits 338. 36. Combinational Logic Circuits. 37. Microcomputer Basics. Part VI: PRACTICAL APPLICATIONS. 38. Printed Circuit Board Fabrication. 39. Printed Circuit Board Assembly and Repair. 40. Basic Troubleshooting. Glossary. Self-Test Answers. Appendix 1: Electronics Abbreviations. Appendix 2: Periodic Table of Elements. Appendix 3: The Greek Alphabet. Appendix 4: Metric Prefixes Used in Electronics. Appendix 5: Resistor Color Codes. Appendix 6: Capacitor Color Code. Appendix 7: Electronics Symbols. Appendix 8: Semiconductor Schematic Symbols. Appendix 9: Digital Logic Symbols. Appendix 10: DC and AC Circuit Formulas. Index.

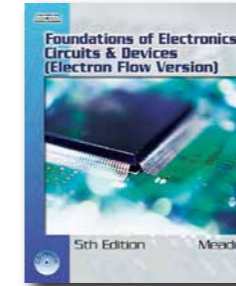
FOUNDATIONS OF ELECTRONICS, 5E

Circuits & Devices, Electron Flow Version

Russell Meade

© 2007, 1072pp, Hardback, 9781418005375

ebook



The Fifth Edition has been updated to better provide a foundation in power supplies, amplifiers, oscillators, op-amps, and optoelectronic systems that readers need to launch a career or pursue more advanced study.

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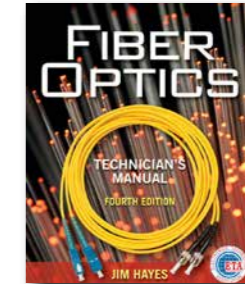
Basic Concepts of Electricity Electrical Quantities and Components Ohms Law. Series Circuits Parallel Circuits Series-Parallel Circuits Basic Network Theorems Network Analysis Techniques Magnetism and Electromagnetism Measuring Instruments Basic AC Quantities The Oscilloscope Inductance Inductive Reactance in AC RL Circuits in AC Basic Transformer Characteristics Capacitance Capacitive Reactance In AC RC Circuits in AC RLC Circuit Analysis Series and Parallel Resonance Semiconductor Materials and P-N Junctions Diodes and Diode Circuits Power Supply Circuits Bipolar Junction Transistors BJT Amplifier Circuits Field-Effect Transistors and Circuits Operational Amplifiers Oscillators and Multivibrators Thyristors. Optoelectronics Optoelectronic Application Circuits

TELECOMMUNICATIONS

FIBER OPTICS TECHNICIAN'S MANUAL, 4E

Jim Hayes, The Fiber Optic Association

© 2011, 288pp, Paperback, 9781435499652



FIBER OPTICS TECHNICIAN'S MANUAL, 4E is a practical guide for designers, installers, and troubleshooters of fiber optic cable plants and networks. It reflects recent changes in fiber optic technology, marketing, and applications, including

wider usage of Fiber To The Home (FTTH) applications and Local Area Networks (LANs). This book begins with a brief history of the development of fiber optics and progresses from the basics of this technology and its components, to installation and testing. FIBER OPTICS TECHNICIAN'S MANUAL, 4E will provide you with a comprehensive overview of all aspects of fiber optics as used in communications systems, including telephone, CATV, and computers.

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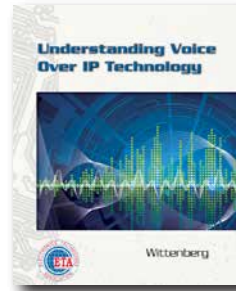
1. Introduction. 2. History of FO Development. 3. Basics of FO. 4. Networks. 5. Cables. 6. Cable Specifications. 7. Connectors and Splices. 8. Fiber Optic Hardware. 9. Getting Started. 10. Guidelines for Fiber Optic Design and Installation. 11. Link Loss Budgets. 12. Safety issues. 13. Planning The Install. 14. Documentation. 15. Estimating and Bidding Networks. 16. Cable Installation. 17. Restoration. 18. Testing.

UNDERSTANDING VOICE OVER IP TECHNOLOGY

Nicholas Wittenberg

© 2010, 448pp, Paperback, 9781435427273

ebook



Understanding Voice Over IP Technology provides students with the in-depth knowledge of Voice over IP technology, or making telephone calls over data networks such as the Internet, has now reached the tipping point, and is expected to eventually

become the standard telephone technology. The text is flexible enough to be used in the classroom, at home, and in the workplace.

CONTENTS

SECTION 1: VOICE OVER IP OVERVIEW. 1. Voice over IP Overview. What is VoIP. Residential/Small Business VoIP. Corporate VoIP. VoIP for Telephone Companies and Service Providers. 2. Why VoIP. Converging Networks. Benefits of VoIP. Issues with VoIP. Driving VoIP. 3. How Does VoIP Work? Call Control. Call Manager. Transmitting Voice. 4. Quality of Service. Quality of Service (QoS) Factors. Bandwidth: Share or Restrict. Providing QoS. Packet Level Techniques for Providing QoS. 5. Is Your Network Ready for VoIP? Power over Ethernet. The Wiring Closet. Bandwidth. Infrastructure Upgrades. Telephony State of Mind. 6. Components of the Voice over IP System. Major Players. VoIP Products. Vendor Specific. SECTION 2: TCP/IP, THE PLATFORM FOR VOIP. 7. Introduction to TCP/IP. Why TCP/IP?. Who makes TCP/IP. Protocols and applications. OSI reference model. 8. Data Link Layer. Data Link layer. Ethernet. Address Resolution Protocol. Protocol analyzers. 9. Internet Protocol. Internet Protocol. Packet structure. ICMP. 10. IP Addressing. IP addressing. Classful addressing scheme. Subnetting. Private IP Addresses. Classless IP Addressing. 11. TCP and UDP. Transmission Control Protocol. Port

Assignments. TCP Header. TCP States. User Datagram Protocol. 12. DHCP. DHCP Overview. DHCP Communications. 13. DNS. Name Resolution. Hosts. Domain Name System. SECTION 3: VOICE OVER IP TECHNICAL DETAILS. 14. How IP Handles Voice. TCP/IP and Voice Protocols. Real-time Transport protocol Real-time Control Protocol. 15. Voice to Digital. Sampling, Nyquist theorem. Quantisation, companding, A-law and mu-law. Waveform Coding, G.711, G.726. Voice Coding, LPC, CELP and its variations, GSM, SPEEX, iLBC 1. More Codec Considerations - MOS, processing, licensing. VoIP Bandwidth. 16. Implementing QoS. QoS Overview. 802.1Q/802.1p. Type of Service. Differentiated Services. Multiprotocol Label Switching (MPLS). 17. H.323. H.323 Overview. Call Signaling and Setup. H.225, H.245. 18. SIP in Detail. Session Initiation Protocol (SIP). SIP Architecture. Session setup. SIP Message Structure. 19. Voice Gateways. Voice Gateways. Monolithic Gateways. FXO and FXS. Megaco. 20. Setting up a modern VoIP System. Outside Connections for your VoIP System. Direct Inward Dialing (DID). The Dial Plan. ENUM. Traversing NAT and Firewalls. Appendices: Technical topics not appropriate for the body of the textbook. Answer key.

EMERGENCY SERVICES

EMERGENCY MEDICAL SERVICES

EMERGENCY MEDICAL TECHNICIAN EXAM REVIEW, 2E

Kirsten M. Elling, Hudson Valley Community College

© 2013, 320pp, Paperback, 9781133131267

ebook



With over 1,500 practice questions, the second edition of Emergency Medical Technician Exam Review is essential for anyone planning a career as an EMT. Designed to prepare you for the state or national certification exam, questions are based on the

EMT level of the National EMS Educational Standards and follow the American Heart Association Guidelines for ECC and CPR. In addition, a CD-ROM included in the back of the book contains two full-length practice exams that are fully updated for the new second edition. Emergency Medical Technician Exam Review features simple to complex questions based on realistic scenarios to ensure that you practice for success!

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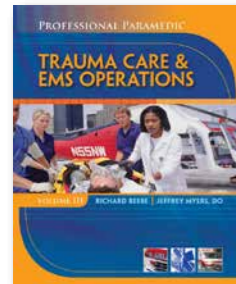
PROFESSIONAL PARAMEDIC, VOLUME III

Trauma Care & EMS Operations

Richard Beebe, Bassett Healthcare; Myers

© 2012, 752pp, Paperback, 9781428323483

ebook



Develop proficiency as a paramedic and deliver high quality critical care with the all-new Professional Paramedic Series! Based on the National EMS Education Standards, this economical three-volume series equips you with the resources necessary for

both paramedic certification and re-certification. Comprehensive, yet street-friendly, each volume in the series walks you through the skills and concepts critical to the job of a Paramedic. The framework of each book is practical in approach: introducing principles, skills and terminology; presenting a typical case; walking through critical response steps; and again reviewing key concepts to ensure understanding for successful application on the job. Volume III: Trauma Care & EMS Operations highlights special response considerations and a broad range of operational medical topics to prepare readers with the complete spectrum of knowledge required to succeed as a Paramedic. Topics include traumatic brain injury, environmental medicine, specialty care transport, triage systems, and much more. This book follows up on the fundamental information covered in Volume I: Foundations of Paramedic Care and the application of skills in emergency situations in Volume II: Medical Emergencies, Maternal Health & Pediatrics. Practical and reader-friendly, each volume includes a full color design with detailed photos, graphics and step-by-step skill sequences to ensure you are fully prepared for the responsibilities, adventures, and challenges of a paramedic.

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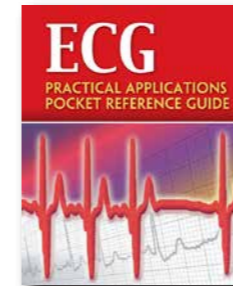
ECG

Practical Applications Pocket Reference Guide

Kathryn Lewis, Phoenix College

© 2010, 368pp, Spiral, 9781435441231

ebook



ECG Practical Application Pocket Reference Guide is an easy to use, comprehensive reference tool for use by all levels of clinicians, EMS providers, and any students of electrocardiography related to patient care. With its easy to use chapter design both students and practicing professionals can use this pocket guide to quickly obtain the answer to many commonly encountered arrhythmias, their ECG characteristics, signs and symptoms and proposed interventions on the job. This pocket guide includes medication profiles, a list of related abbreviations, a quick review of assessment and interventions and normal ranges and variations in the adult ECG. The organization of this reference guide continually reminds users that the ECG shows us the clues, not the disease.

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Dedication. Forward. Editorial Board. Acknowledgements. Introduction. Table of Contents. 1. Assessment of the Cardiac Patient. 2. The Electrocardiogram. 3. Complications and Management of the Cardiac Patient. 4. Medications, Electrolytes and the ECG. 5. Sinus Rhythm and the Sinus Arrhythmias. 6. Junctional Rhythm and the Junctional Arrhythmias. 7. Atrial Ectopy and the Atrial Arrhythmias. 8. Ventricular Ectopy, Ventricular Arrhythmias, Asystole and Pulseless Electrical Activity. 9. AV Conduction Defects. 10. Electronic Pacemakers. 11. Arrhythmias due to Abnormal Conduction Pathways. 12. Myocardial Infarction. 13. Intraventricular Conduction Defects. 14. Chamber Enlargement and Hypertrophy. 15. Arrhythmias in Pediatric Patients. Appendix A: Medication Profiles. Appendix B: Emergency Cardiac Care Guidelines.

Appendix C: Quick Review of Assessment and Interventions. Appendix D: Glossary. Appendix E: List of Abbreviations.

FIRE RESCUE AND EMERGENCY

HIGHWAY SCENE SAFETY

Leslie J. Greenwood

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ebook



Practice safe procedures when responding to highway incidents with HIGHWAY SCENE SAFETY. A valuable learning tool for emergency response safety courses or as a handy reference manual for the field, this book focuses on operational guidelines necessary to conducting effective highway management while on the scene of the incident. Emphasizing the need to reduce line of duty deaths for all emergency responders, this book covers pre-planning, the national incident command system, governing laws, interagency communications, personal protective clothing, roadway considerations and other topics required for a safe response.

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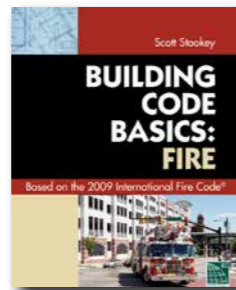
Part I: WHY DO WE NEED TO HAVE SAFETY ON HIGHWAY INCIDENTS? 1. Historic Incidents. 2. Governing Laws, Rules, and Standards. 3. Understanding safety at highway incidents. 4. Vehicle and driver reactions on the roadways. Part II: TRAFFIC MANAGEMENT - THE HOW TO. 5. How does the Manual on Uniform Traffic Control Device Manual work for us. 6. Fundamentals of Traffic Management. 7. Roadway Characteristics. 8. Setting the scene. 9. Proper Signage. 10. Personal Protective

equipment. Part III: FLAGGING OPERATIONS. 11. Why train in flagging operations? 12. Standardization of Flagging Methods. 13. Conducting proper flagging procedures. 14. Equipment needed for operations. 15. Communications needs. 16. What is a flagger emergencies? Part IV: PREPLANNING CONSIDERATIONS. 17. Working with different organizations. 18. Conducting Planning Meetings. 19. Detour Considerations. 20. Helicopter Ops and considerations. Part V: INCIDENT ORGANIZATION - QUICK DOWN AND DIRTY OF ICS. 21. What is the National Incident Management System? 22. How to implement ICS at Highway Incidents. 23. Model Examples. 24. Inter-agency cooperation - the four C's - consensus. Part VI: APPARATUS CONSIDERATIONS. 25. Apparatus Designs. 26. Placement of Apparatus. 27. Lighting considerations. Part VII: SAFETY CONSIDERATIONS. 28. Safety Officer Responsibilities. 29. Responder early warning. 30. Responders/Traffic Rehab. 31. Secondary Crashes. 32. Quick clearance policy. Appendix A - Glossary of Terms. Appendix B - Manual on Uniform Traffic Control Devices - Standard. Appendix C - Incident Checklist. Appendix D - ICS Forms.

CODE BASICS SERIES: 2009 INTERNATIONAL FIRE CODE

International Code Council (ICC)

© 2010, 220pp, Paperback, 9781435400702



Comprehensive coverage and strong, clear connections between building- and fire-related concepts and the International Fire Code® requirements that govern them form the cornerstone of this valuable resource. The CODE BASIC BOOK

FOR THE 2009 INTERNATIONAL FIRE CODE® is designed to explore the proper application and use of the 2009 International Fire Code®, by offering detailed guidance of the basic provisions found in the Code®. It begins with a section of prerequisite reading, explaining occupancy classifications, what they are, and how they should be applied. This is critical in establishing a foundational knowledge that readers can build upon as they progress through subsequent content. The book is then divided into six logically organized sections, and covers important topics as they pertain to the Code®, including firefighter's response to buildings, fire department access to roadways, firefighter protection systems, sprinkler systems, hazards in buildings and communities, compressed gasses, combustible liquids, basic requirements for storage & use for hazardous materials, and much more. Straightforward and easy-to-read, it is an indispensable tool for fire inspectors, code officials, fire marshals, design professionals, firefighters, and anyone studying to enter these fields. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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PREFACE. About the International Fire Code. Acknowledgements. Author. PREREQUISITE READING. Part 1: CODE ADMINISTRATION AND ENFORCEMENT. 1. Introduction to Building and Fire Codes. Code Development. The Building Codes: Scope and Limitations. International Fire Code (IFC). 2. Legal Aspects, Permits and Inspections. Code Adoption. Authority. Permits. Inspections. Board of Appeals. Part 2: GENERAL SAFETY REQUIREMENTS. 3. General Precautions Against Fire. Combustible Materials. Ignition Sources. Open Flames. Vacant Premises. Indoor Displays. 4. Emergency Planning and Preparedness. Emergency Forces Notification. Public assemblies and events. Fire safety and Evacuation Plans. Emergency Evacuation Drills. Employee Training and Response. Part 3: SITE AND BUILDING SERVICES. 5. Fire Service Features. Fire Apparatus Access Roads. Access to Buildings. Hazards to Firefighters. Fire Protection Water Supplies. Emergency Responder Radio Coverage. 6. Building Systems. Fuel Fired Appliances. Emergency and Standby Power Systems. Elevator Recall and Maintenance. Commercial Kitchen Hoods. 7. Interior Finish and Decorative Materials. Purpose of the Requirements. Interior Wall and Ceiling Finish and Trim. Upholstered Furniture and Mattresses. Part 4: FIRE / LIFE SAFETY SYSTEMS AND FEATURES. 8. Requirements for All Fire Protection Systems. Purpose. When are Fire Protection Systems Required. Construction Documents and Acceptance Testing. Inspection, Testing and Maintenance. Fire Protection System Impairment. Fire Protection System Monitoring. 9. Automatic Sprinkler Systems. Level of Exit Discharge and Fire Area. Design and Installation Standards. Types of Automatic Sprinkler Systems. Occupancies Requiring Automatic Sprinkler Protection. Fire Department Connection. 10. Fire Alarm and Detection Systems. Design and Installation Standards. Fundamental Components. Occupancies Requiring Fire Alarm and Detection Systems. 11. Means of Egress. Definitions. Occupant Load. Egress Width. Number of Exits. Exit Access and Travel Distance. Exit Signs and Means of Egress Illuminations. Two-way Communications. Part 5: SPECIAL PROCESSES & BUILDING

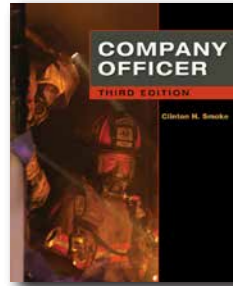
USES. 12. Flammable Finishes. Applicability. Types of Flammable Finishing Processes. Spray Finishing. Powder Coating. 13. Motor Fuel-Dispensing Facilities and Repair Garages. Hazards Review of Conventional and Alternative Fuels. Dispensing Devices and Operations. Flammable and Combustible Liquid Dispensing. Liquefied Petroleum Gas Dispensing. Repair Garages. 14. High-Piled Combustible Storage. Applicability. Commodities. High-Piled Combustible Storage Areas. Storage Methods. Aisles. Automatic Sprinkler Systems. 15. Other Special Processes and Uses. Combustible Dust Producing Operations. Fire Safety During Construction and Demolition. Lumber Yards and Woodworking Operations. Hot Work. Part 6: HAZARDOUS MATERIALS. 16. General Requirements for Hazardous Materials. Material Classification. Hazardous Material Reporting. Storage and Use. Maximum Allowable Quantity Per Control Area. Control Areas. Hazard Identification Signs. Separation of Incompatible Materials. 17. Compressed Gases. Containers, Cylinders and Tanks. Pressure Relief Devices. Markings. Security. Valve Protection. Separation from Hazardous Conditions. Exhausted Enclosures and Gas Cabinets. Leaks, Damage or Corrosion. 18. Flammable and Combustible Liquids. Classification of Liquids. Containers, Portable Tanks and Stationary Tanks. Design and Construction of Storage Tanks. Storage Tank Openings.

COMPANY OFFICER, 3E

Clinton H. Smoke, Northern Virginia Community College;
Charles Keeton; Billy Jack Wenzel; Bradford Boyd

© 2010, 464pp, Paperback, 9781435427259

ebook



Based on the 2009 Edition of NFPA 1021, STANDARD FOR FIRE OFFICER PROFESSIONAL QUALIFICATIONS, the third edition of Company Officer provides vital information for those who seek certification as Fire Officer I or II. Learning

objectives in this new edition were validated by a committee of experts from the field to ensure that the content meets the intent of the Standard and highlights contents for each of these two officer levels. Content was thoroughly reviewed and updated to reflect new technology, practices, and terminology to remain current in the field as well as to focus on issues critical to the fire officer today – budgeting, labor management, legal implications of actions, and more. In the tradition of previous editions, Company Officer, Third Edition continues to provide valuable insight and advice for aspiring and current fire officers alike.

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Chapter 1: The Company Officer's Role-Challenges and Opportunities. Chapter 2: The Company Officer's Role in Effective Communications. Chapter 3: The Company Officer's Role in the Organization. Chapter 4: The Company Officer's Role in Management. Chapter 5: The Company Officer's Role in Managing Resources. Chapter 6: The Company Officer's Role: Principles of Leadership. Chapter 7: The Company Officer's Role in Leading Others. Chapter 8: The Company Officer's Role in Personnel Safety. Chapter 9: The Company Officer's Role in Fire Prevention. Chapter 10: The Company Officer's Role in Understanding Building Construction and Fire Behavior. Chapter 11: The Company Officer's Role in Fire Investigation.

Chapter 12: The Company Officer's Role Planning and Readiness. Chapter 13: The Company Officer's Role in Incident Management.

ENGINEERING

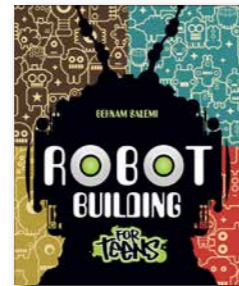
ELECTRICAL & COMPUTER ENGINEERING

ROBOT BUILDING FOR TEENS

Behnam Salemi

© 2014, 352pp, Paperback, 9781133948650

ebook



ROBOT BUILDING FOR TEENS teaches the fundamentals of robot creation, including how to design a robot, how to create a prototype, where to buy parts, and how to program the finished robot to perform tasks.

CONTENTS

1. The Runaway Robot, or Bug-Like Intelligence. 2. Built-In Intelligence. 3. Sensing and Acting. 4. Digital Brain. 5. Programming the DB-Bot. 6. Who Else is Using Digital Brains? 7. Extending DB-Bot. 8. Robotic Applications and New Directions. 9. What the Future Holds.

NEW EDITION

AE PKG FUNDAMENTALS OF LOGIC DESIGN + CD: ENHANCED EDITION, 7E

Charles H. Roth, Jr., University of Texas, Austin; Larry L. Kinney, University of Minnesota; Eugene B. John, University of Texas, Austin

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Cengage
ASIA/TITLE



Provide your students with an exceptional balance of theory and application as Roth/Kinney/John's FUNDAMENTALS OF LOGIC DESIGN, ENHANCED, 7th Edition presents today's latest advances. Your students gain a strong understanding

of the fundamental concepts of logic design without becoming overwhelmed by the mathematics of switching theory. The authors have created 20 easy-to-grasp study units that clearly introduce fundamental concepts, such as Boolean algebra, logic gate design, flip-flops and state machines. By combining coverage of flip-flops with networks of logic gates, students are prepared to design counters, adders, sequence detectors and simple digital systems. After mastering the basics, students progress to modern design techniques using programmable logic devices as well as VHDL hardware description language. WebAssign digital teaching tool is available as a customizable resource to strengthen your students' understanding of today's concepts behind logic design.

CONTENTS

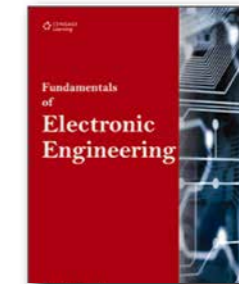
1. Introduction: Number Systems and Conversion 2. Boolean Algebra 3. Boolean Algebra (Continued) 4. Applications of Boolean Algebra Minterm and Maxterm Expansions 5. Karnaugh Maps 6. Quine-McCluskey Method 7. Multi-Level Gate Circuits NAND and NOR Gates 8. Combinational Circuit Design and Simulation Using Gates 9. Multiplexers,

Decoders, and Programmable Logic Devices 10. Introduction to VHDL 11. Latches and Flip-Flops 12. Registers and Counters 13. Analysis of Clocked Sequential Circuits 14. Derivation of State Graphs and Tables 15. Reduction of State Tables State Assignment 16. Sequential Circuit Design 17. VHDL for Sequential Logic 18. Circuits for Arithmetic Operations 19. State Machine Design with SM Charts 20. VHDL for Digital System Design

FUNDAMENTALS OF ELECTRONIC ENGINEERING

Rajendra Prasad, Rajendra Prasad; former Professor and Head, Department of Electrical Engineering, National Institute of Technology (NIT), Patna

© 2012, 0pp, Paperback, 9788131515457



CONTENTS

1. Semiconductor Devices. 2. Transistors. 3. Devices Using Diode as an Element. 4. Electronic Amplifiers. 5. Special Amplifiers. 6. Wave Generators. 7. Attenuators and Filters. 8. Cathode-Ray Oscilloscope. 9. Electrical Power Supplies. 10. Digital Systems. 11. Components of Digital Systems. 12. Digital Computer. 13. Communication Systems.

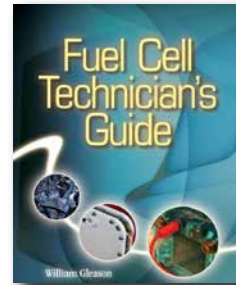
ENGINEERING MECHANICS

FUEL CELL TECHNICIAN'S GUIDE

William Gleason, Montana Tech, University of Montana

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ebook



THE FUEL CELL TECHNICIAN'S GUIDE explains fuel cells and systems without requiring advanced knowledge in science or engineering for the installation, implementation, hand troubleshooting, and repair of fuel cells and systems.

This book begins with the history of fuel cells and goes on to discuss various kinds of fuel cells, system balance-of-plant issues, safety, and codes and standards that you would encounter on a real job site. Varying fuel cells are used as primary examples throughout the text, providing several different views of how fuel cells work, where they work best, and why these concepts are important.

CONTENTS

1. History of Fuel Cells. 2. What is a Fuel Cell? 3. Fuel Cell and Hydrogen Safety. 4. Types of Fuel Cells, Chemical Reactions, Classifications and Characteristics & Applications. 5. Fuel Cell Basic System Components. 6. Fuel Cell Sub-Systems. 7. Fuel Cell Systems. 8. Stationary Fuel Cell Applications. 9. Transportation and Material Handling Fuel Cells. 10. Fuel Cell Systems Process and Instrumentation P&I Diagrams. 11. Fuel Cell Systems Power and Control Schematics. 12. Distributed Generation. 13. Combined Heat and Power CHP. 14. Overall Design, Installation, Maintenance and Troubleshooting & Repair.

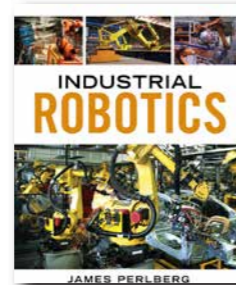
GENERAL ENGINEERING

INDUSTRIAL ROBOTICS

Keith Dinwiddie, Ozarks Technical Community College

© 2019, 304pp, Paperback, 9781133610991

CENGAGE | MINDTAP ebook



Offering current, comprehensive coverage, INDUSTRIAL ROBOTICS delivers a thorough introduction to the industry and a basic understanding of the subjects needed for starting a career in industrial robotics.

CONTENTS

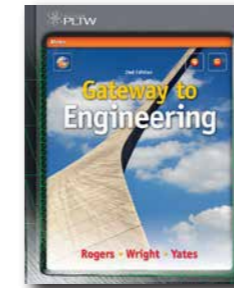
1. Introduction to Industrial Robots and Automation. 2. Robot Types and Classification. 3. Robot Programming. 4. End of Arm Tooling. 5. Integration and Networking. 6. Automation Sensors. 7. Economic Issues. 8. Robot Interfacing and the Human/Machine Interface. 9. Vision Systems. 10. Safety. 11. Maintenance. Appendix A: Flow Charting Symbols. Appendix B: Recommended Tool List.

GATEWAY TO ENGINEERING, 2E

George E. Rogers, Purdue University; Michael D. Wright, University of Central Missouri; Ben Yates, Missouri University of Science and Technology

© 2014, 480pp, Hardback, 9781133935643

ebook



GATEWAY TO ENGINEERING, 2E helps you build a solid foundation in technological literacy as you study engineering-related careers and educational pathways. With a vibrant four-color design and images to help you visualize concepts, the text introduces the process

of design, the importance of engineering graphics, and applications of electricity and electronics, mechanics, energy, communications, automation/robotics, manufacturing processes, and control systems/computer programming. The Second Edition includes a revised chapter featuring sustainable architecture and enhanced coverage of green technology. It also retains a strong engineering flavor and alignment with national Standards for Technological Literacy, making it the perfect tool for mastering Project Lead the Way's® Gateway to Technology performance objectives.

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UNIT 1: INTRODUCTION TO ENGINEERING. 1. Engineering and Technology. 2. Technological Resources and Systems. UNIT 2: COMMUNICATING ENGINEERING IDEAS. 3. The Engineering Design Process. 4. Sketching. 5. Perspective Drawings. 6. Reverse Engineering. UNIT 3: MODELING ENGINEERING DESIGNS. 7. Parametric Modeling. 8. Prototyping. UNIT 4: THE USE OF ENERGY IN ENGINEERING. 9. Energy. 10. Sustainable Architecture. 11. Transfer of Energy. 12. Fluid Power. 13. Flight and Space. UNIT 5: ELECTRICITY AND ELECTRONICS. 14. Electrical Theory. 15. Electrical Circuits. 16. Electronics. UNIT 6: ROBOTICS AND AUTOMATION. 17. Manufacturing. 18. Robotics. 19. Automation. 20. Emerging Technologies.

INDUSTRIAL ENGINEERING

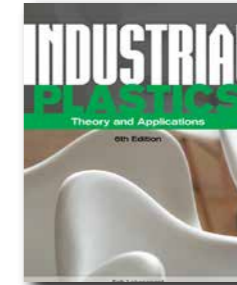
INDUSTRIAL PLASTICS, 6E

Theory and Applications

Erik Lokensgard, Eastern Michigan University, Ypsilanti, MI

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ebook



Now in its 6th edition, Industrial Plastics: Theory and Applications is back, with the extensive, detailed graphics and practical lab exercises that made previous editions so popular. In this latest edition, these trademark features accompany updated coverage of the plastics industry, offering the very latest information on

state-of-the-art equipment, with a special emphasis on processing techniques. Coverage includes plastics recycling, ISO and ASTM testing specifications, current health and safety standards, as well as examinations of current environmental issues like recycling, pollution, and incineration. With such broad coverage alongside hands-on activities to provide a clear link between theory and practice, Industrial Plastics continues to be an invaluable resource for students and professionals alike.

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1. Historical Introduction to Plastics. 2. Current Status of the Plastics Industry. 3. Elementary Polymer Chemistry. 4. Health and Safety. 5. Elementary Statistics. 6. Properties and Tests of Selected Plastics. 7. Ingredients of Plastics. 8. Characterization and Selection of Commercial Plastics. 9. Machining and Finishing. 10. Molding Processes. 11. Extrusion Processes. 12. Laminating Processes and Materials. 13. Reinforcing Processes and Materials. 14. Casting Processes and Materials. 15. Thermoforming. 16. Expansion Processes. 17. Coating Processes. 18. Fabrication Processes and Materials. 19. Decorating Processes. 20. Radiation Processes. 21. Design Considerations. 22. Tooling and Moldmaking. 23. Commercial Considerations.

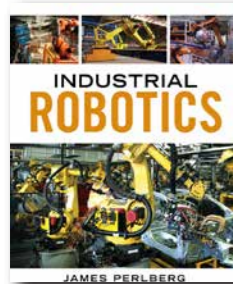
MECHANICAL AND AEROSPACE ENGINEERING

INDUSTRIAL ROBOTICS

Keith Dinwiddie, Ozarks Technical Community College

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Offering current, comprehensive coverage, INDUSTRIAL ROBOTICS delivers a thorough introduction to the industry and a basic understanding of the subjects needed for starting a career in industrial robotics.

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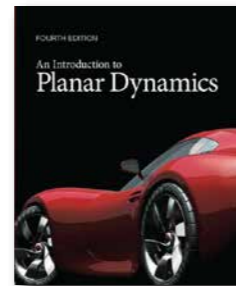
1. Introduction to Industrial Robots and Automation.
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 4. End of Arm Tooling.
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 6. Automation Sensors.
 7. Economic Issues.
 8. Robot Interfacing and the Human/Machine Interface.
 9. Vision Systems.
 10. Safety.
 11. Maintenance.
- Appendix A: Flow Charting Symbols. Appendix B: Recommended Tool List.

AN INTRODUCTION TO PLANAR DYNAMICS, 4E

Chen Guang, Nanyang Technological University; Yap Fook Fah, Nanyang Technological University

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Cengage
ASIATITLE



This book is intended for students of common engineering taking a fundamental course in mechanics. The material in this book is tailored in a concise manner for teaching the major contents of Dynamics in one semester. Students will be guided in

studying the concepts and fundamental principles of Dynamics through the study of planar motion of particles and rigid bodies. Throughout the book, vector is used as a basic mathematical tool. The authors believe that basic training in vector analysis will be of great help to students to understand in depth the concepts and principles in Planar Dynamics. Students will be equipped with the basic knowledge for further study in the broad field of engineering.

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Preface List of Symbols CHAPTER 1 KINEMATICS OF PARTICLES CHAPTER 2 KINEMATICS OF RIGID BODIES CHAPTER 3 KINETICS OF PARTICLES CHAPTER 4 KINETICS OF RIGID BODIES Appendix A Vector Preliminaries Appendix B Physical Explanation of Coriolis Acceleration – The Coupling of Relative and Entrained Motion Appendix C Definition of Various Moments in Planar Dynamics Appendix D Proof of Equations 4.28, 4.29 and 4.49 Appendix E Principle of Angular Momentum for a Rigid Body about a Moving Point C Appendix F Work of a Couple Appendix G Motion of a Particle in a Non-Inertial Frame – Entrained Inertia Force and Coriolis Inertia Force Appendix H Equation Maps of Kinematics and Kinetics Appendix I Moment of Inertia of Some Uniform Slabs Index

HVAC-R

BLUEPRINT READING

BLUEPRINTS AND PLANS FOR HVAC, 4E

Joseph Moravek, Nance Universal HVACR Technical School, Beaumont, Texas; Curtis McGuirt, Nance International, Beaumont, Texas; Wilma B. Miller, Worcester Polytechnic Institute

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ebook



Packed with vivid illustrations and a complete set of commercial prints, best-selling BLUEPRINTS AND PLANS FOR HVAC, 4th Edition combines in-depth instruction with relevant hands-on applications to equip you with the skills to succeed in

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1. Review of Basic Mathematical Procedures.
2. Safety.
3. Linear Measurements.
4. Angular Measurements.
5. Learning to Use the Architect's Scale.
6. Learning to Use the Engineer's Scale.

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8. How Working Drawings are Created.
9. Categories of Working Drawings.
10. Sections, Elevations and Details.
11. Creating Construction Drawings.
12. Who Uses Construction Drawings.
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14. Title Blocks.
15. Types and Weights of Lines.
16. Orthographic Projection.
17. Oblique Drawings.
18. Isometric Drawings.
19. Lettering and Notations.
20. Organizing a Drawing Sheet.
21. Shading and Crosshatching.
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29. Reading Electrical Plans.
30. Reading Plumbing Plans.
31. Current Technology.
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34. Glossary.
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COOLING

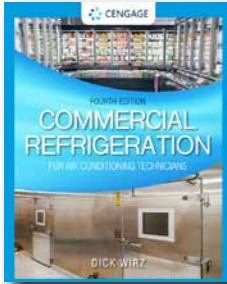
NEW EDITION

COMMERCIAL REFRIGERATION FOR AIR CONDITIONING TECHNICIANS, 4E

Dick Wirz

© 2022, 400pp, Hardback, 9780357453704

CENGAGE | MINDTAP ebook



Reader-friendly and packed with useful tips, photos and charts, **COMMERCIAL REFRIGERATION FOR AIR CONDITIONING TECHNICIANS, Fourth Edition**, helps you apply existing HVACR skills to new concepts in order to service medium- and low-

temperature refrigeration equipment such as walk-ins, reach-ins, refrigerated cases and ice machines. The text focuses on the food service industry and includes “how-to” advice from experienced professionals on installing, servicing and troubleshooting commercial equipment. Extensively updated throughout the text, the Fourth Edition includes a simplified, step-by-step flowchart for quickly diagnosing and addressing the nine most common refrigeration problems on the job—as well as new information on the latest advances in commercial refrigeration. Ideal for advanced refrigeration courses, this trusted text is equally valuable as a real-world resource you can take from the classroom to keep on hand in the truck or shop. **COMMERCIAL REFRIGERATION FOR AIR CONDITIONING TECHNICIANS, Fourth Edition**, is an indispensable tool for any technician working with commercial refrigeration today.

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Preface. 1. Refrigeration. 2. Evaporators. 3. Condensers. 4. Compressors. 5. Metering Devices. 6. Controls and Accessories. 7. Refrigeration System Troubleshooting. 8. Compressor Motor Controls. 9. Retrofitting, Recovery, Evacuation and

Charging. 10. Supermarket Refrigeration. 11. Walk-in Refrigerators and Freezers. 12. Ice Machines. 13. Product Temperatures for Preservation and Health. 14. Refrigeration Business Tips. Appendix A: Summary of T.R.O.T. Appendix B: Pressure Temperature (P/T) Chart. Appendix C: Troubleshooting Charts. Glossary. Index.

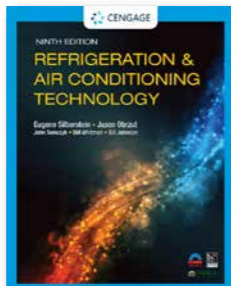
NEW EDITION

REFRIGERATION & AIR CONDITIONING TECHNOLOGY, 9E

John Tomczyk, Retired from Ferris State University and from writing the Refrigeration and Air Conditioning Technology title; Eugene Silberstein, Suffolk County Community College, Brentwood, NY; John Tomczyk, Retired from Ferris State University and from writing the Refrigeration and Air Conditioning Technology title; Bill Whitman

© 2021, 1728pp, Hardback, 9780357122273

CENGAGE | MINDTAP ebook



Develop the knowledge and skills you need to maintain and troubleshoot today's complex heating, air conditioning, and refrigeration systems with **REFRIGERATION & AIR CONDITIONING TECHNOLOGY, Ninth Edition**. This best-selling,

easy-to-understand resource provides hands-on guidance, practical applications, and the solid foundation you need to understand modern HVAC service and repair, its environmental challenges, and their solutions. Focused on sustainable technology and emphasizing new technologies and green awareness, the Ninth Edition features the latest advances in the HVAC/R industry, including updated content throughout the text and more than 400 new and revised figures and images. Drawing on decades of industry experience, the authors also cover the all-important soft skills and customer relations issues that today's professionals need to master for career success. Memorable real-world examples, hundreds of vibrant photos, and unique

Service Call features bring key concepts to life and help you develop the knowledge and skills to succeed in today's dynamic industry.

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SECTION I: THEORY OF HEAT. 1. Heat and Pressure. 2. Matter and Energy. 3. Refrigeration and Refrigerants. SECTION II: SAFETY, TOOLS AND EQUIPMENT, SHOP PRACTICES. 4. General Safety Practices. 5. Tools and Equipment. 6. Fasteners. 7. Tubing and Piping. 8. Leak Detection, System Evacuation and System Clean-up 9. Refrigerant and Oil Chemistry and Management—Recovery, Recycling, Reclaiming, and Retrofitting. 10. System Charging. 11. Calibrating Instruments. SECTION III: BASIC AUTOMATIC CONTROLS. 12. Basic Electricity and Magnetism. 13. Introduction to Automatic Controls. 14. Automatic Control Components and Applications. 15. Troubleshooting Basic Controls. 16. Advanced Automatic Controls—Direct Digital Controls (DDC) and Pneumatics. SECTION IV: ELECTRIC MOTORS. 17. Types of Electric Motors. 18. Application of Motors. 19. Motor Controls. 20. Troubleshooting Electric Motors. SECTION V: COMMERCIAL REFRIGERATION. 21. Evaporators and the Refrigeration System. 22. Condensers. 23. Compressors. 24. Expansion Devices. 25. Special Refrigeration System Components. 26. Application of Refrigeration Systems. 27. Commercial Ice Machines. 28. Special Refrigeration Applications. 29. Troubleshooting and Typical Operating Conditions for Commercial Refrigeration. SECTION VI: AIR CONDITIONING (HEATING AND HUMIDIFICATION). 30. Electric Heat. 31. Gas Heat. 32. Oil Heat. 33. Hydronic Heat. 34. Indoor Air Quality. Section VII: AIR CONDITIONING (COOLING). 35. Comfort and Psychrometrics. 36. Refrigeration Applied to Air Conditioning. 37. Air Distribution and Balance. 38. Installation. 39. Residential Energy Auditing 40. Typical Operating Conditions. 41. Troubleshooting. SECTION VIII: ALL-WEATHER SYSTEMS. 42. Heat Gain and Heat Loss in Buildings. 43. Air Source Heat Pumps. 44. Geothermal Heat Pumps. SECTION IX: DOMESTIC APPLIANCES. 45. Domestic Refrigerators and Freezers. 46. Room Air Conditioners. SECTION X: COMMERCIAL

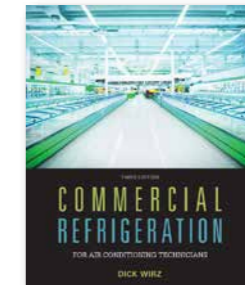
AIR CONDITIONING AND CHILLED-WATER SYSTEMS 47. High-Pressure, Low-Pressure, and Absorption Chilled-Water Systems. 48. Cooling Towers and Pumps. 49. Operation, Maintenance, and Troubleshooting of Chilled-Water Air Conditioning Systems. 50. Commercial Rooftop, Packaged, Variable Refrigerant Flow, and Variable Air Volume Systems.

COMMERCIAL REFRIGERATION FOR AIR CONDITIONING TECHNICIANS, 3E

Dick Wirz

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CENGAGE | MINDTAP ebook



Reader-friendly and packed with useful tips, **COMMERCIAL REFRIGERATION FOR AIR CONDITIONING TECHNICIANS, 3rd Edition**, helps you apply existing skills to new concepts in order to service medium- and low-temperature

refrigeration equipment such as walk-ins, reach-ins, refrigerated cases, and ice machines. Readings focus on the food service industry, and include “how-to” advice from seasoned pros on installing, servicing, and troubleshooting commercial equipment. Freshly updated to include the latest industry changes, this new edition adds six full sections of content, as well as 150 helpful illustrations, pictures, and diagrams—including a step-by-step flowchart for quickly diagnosing and addressing the nine most common refrigeration problems you will see on the job. A resource to keep in your truck or the shop, **COMMERCIAL REFRIGERATION FOR AIR CONDITIONING TECHNICIANS, 3rd Edition**, is ideal for any technician working with commercial refrigeration today.

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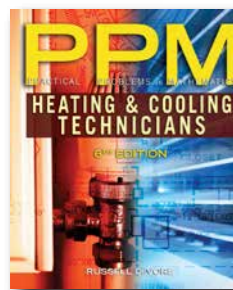
Preface. 1. Refrigeration. 2. Evaporators. 3. Condensers. 4. Compressors. 5. Metering Devices. 6. Controls and Accessories. 7. Refrigeration System Troubleshooting. 8. Compressor Motor Controls. 9. Retrofitting, Recovery, Evacuation, and Charging. 10. Supermarket Refrigeration. 11. Walk-in Refrigerators and Freezers. 12. Ice Machines. 13. Product Temperatures for Preservation and Health. 14. Refrigeration Business Tips. Appendix A: Summary of T.R.O.T. Appendix B: Pressure Temperature (P/T) Chart. Appendix C: Troubleshooting Charts. Glossary. Index.

PRACTICAL PROBLEMS IN MATHEMATICS FOR HEATING AND COOLING TECHNICIANS, 6E

Russell B. DeVore

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ebook



Practical Problems for Heating And Cooling Technicians, 6th Edition gives you the essential quantitative skills to get ahead in the HVAC field today! This text condenses critical mathematical theories into short, easily understood sections, and

illustrates every concept with multiple examples and practice problems drawn from tasks technicians perform on the job every day. Loaded with helpful visual features and study aids, Practical Problems for Heating And Cooling Technicians, 6th Edition puts key information at your fingertips with critical formula conversion charts, a glossary of the latest HVAC-specific terms, hands-on exercises, and optional supplemental tools designed to build your skills and confidence.

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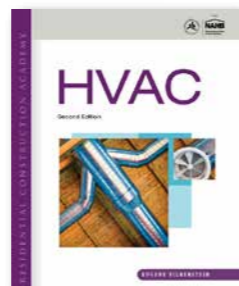
1. Whole Numbers. 2. Common Fractions. 3. Decimal Fractions. 4. Ratio and Proportion. 5. Percent, Percentage, and Discount. 6. Direct Measure. 7. Computed Measure. 8. Formulas. 9. Stretchouts and Lengths of Arcs. 10. Trigonometry. 11. Graphs. 12. Bills.

RESIDENTIAL CONSTRUCTION ACADEMY HVAC, 2E

Eugene Silberstein, Suffolk County Community College, Brentwood, NY

© 2012, 608pp, Hardback, 9781439056349

ebook



RESIDENTIAL CONSTRUCTION ACADEMY HVAC 2nd is a full color, comprehensive text for aspiring technicians, covering installation, startup and service of residential air conditioning and heating systems. The presentation of the material is detailed

with step by step procedures that clearly illustrate key skills needed to properly install a system. Full color illustrations of procedures have side by side descriptions to clarify the instructions. Topics covered include the installation and service of oil, gas, electric and geothermal heating systems as well as boilers, hydronic heating and radiant heating. Now available with this text is The Complete HVAC Lab Manual, which features over 250 lab exercises, covering 15 topic areas. See the supplements section for more details.

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SECTION I: REFRIGERATION FUNDAMENTALS. 1. Matter, Energy and Heat Basics. 2. The Refrigeration Process. 3. General Safety Practices. 4. Refrigerant Management. SECTION II: TOOLS. 5. Hand Tools. 6. Tubing and Piping Tools.

7. Specialized HVAC/R Tools. SECTION III: INSTALLATION. 8. Location. 9. Duct Systems. 10. System Connections. 11. Leak Testing. 12. System Evacuation. 13. System Start-up and Charging. SECTION IV: ELECTRICITY FOR HVAC. 14. Electric Fundamentals. 15. Electric Motors. 16. Electric Controls. 17. Wiring Diagrams. 18. Electric Codes. SECTION V: SYSTEM COMMISSIONING. 19. Testing and Balancing. 20. Indoor Air Quality. 21. Mechanical Troubleshooting. 22. Electrical Troubleshooting. SECTION VI: HEATING SYSTEMS. 23. Electric Heat. 24. Gas Heat. 25. Oil Heat. 26. Hydronic Heat. 27. Heat Pumps.

HVACR 301

John Hohman

© 2011, 464pp, Paperback, 9781418066666

ebook



A continuation of the solid skills development and strong theoretical knowledge established with HVACR 101 and HVACR 201, this third installment in the series guides readers through increasingly advanced concepts in the field. Like the rest of the

series, HVACR 301 is backed by the high standards and cutting-edge resources of the Air Conditioning Contractors of America (ACCA), Plumbing-Heating-Cooling Contractors – National Association Educational Foundation (PHCC Education Foundation), and Refrigeration Service Engineers Society (RSES). Coverage ranges from the troubleshooting of systems and components to concepts of fluid handling systems, cooling towers, and indoor air quality. With a building block approach that ensures readers comprehend simpler concepts before moving on to more complex information, this is the perfect resource for learning and applying advanced HVACR concepts. Check out our app, DEWALT® Mobile Pro™. This free app

is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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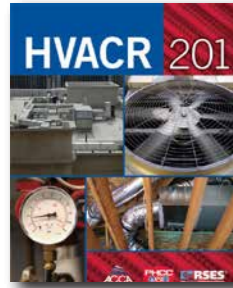
Chapter 1: Servicing & Troubleshooting Systems Chapter 2: TAB (Testing and Balancing) Chapter 3: Energy Efficient Mechanical Systems Chapter 4: Fluid Handling Systems Chapter 5: Applied Electrical Problem Solving Chapter 6: Applied Refrigeration System Problem Solving Chapter 7: Troubleshooting with the Psychrometric Chart Chapter 8: Cooling Towers and Evaporative Condensers Chapter 9: Commercial Air Conditioning and Refrigeration Systems Chapter 10: Water Treatment Chapter 11: IAQ (Indoor Air Quality)

HVACR 201

John E. Hohman, University of North Texas; Joseph Moravek, Nance Universal HVACR Technical School, Beaumont, Texas

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The second installment in a series of useful and resourceful guides, HVACR 201, continues to build upon the basics of the HVACR trade. The result of a joint effort by industry leading Air Conditioning Contractors of America (ACCA), PHCC Educational Foundation

Plumbing Apprentice & Journeyman Training Committee (PHCC Educational Foundation), and the Refrigeration Service Engineers Society (RSES), the book begins with simpler HVACR concepts and progresses into increasingly complex theories and skills. Starting with coverage of all of the important components of a system, the book advances to deal with topics in electrical, heating, motors, and cooling- then moving to troubleshooting and installation procedures. Theoretical knowledge is presented alongside practical, industry-relevant examples, allowing both entry-level technicians and 2nd year apprentices to easily learn and apply key HVACR concepts. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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HVACR 101

Joseph Moravek, Nance Universal HVACR Technical School, Beaumont, Texas

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Designed to guide apprentices, entry-level technicians, and first-year students through their first experiences in the HVAC/R trade, HVAC 101 provides a solid and thorough introduction to the field. It is the culmination of the efforts of industry leaders like the Air Conditioning Contractors of America (ACCA),

PHCC Educational Foundation Plumbing Apprentice & Journeyman Training Committee (PHCC Educational Foundation), and Refrigeration Service Engineers Society (RSES). Backed by these organizations and the high standards and cutting-edge resources that they are known for, the book begins with simple concepts that provide an overview of the world of HVAC/R and its main systems and components. Coverage then progresses to increasingly complex procedures, such as maintenance and inspection, installation and repair, and customer service and sales. This building-block approach, combined with numerous practical examples, makes the book the ideal resource for learning and applying key HVAC/R concepts. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

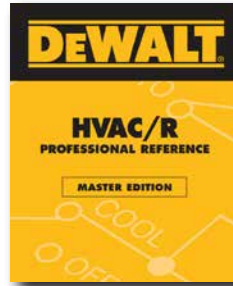
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DEWALT® HVAC/R PROFESSIONAL REFERENCE MASTER EDITION

Paul Rosenberg, Iowa State University; American Contractors Educational Services

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The HVAC/R professional reference contains more than 500 pages of extensive information on such important topics as refrigeration systems, piping, ductwork, motors, compressors, fans, pumps and more.

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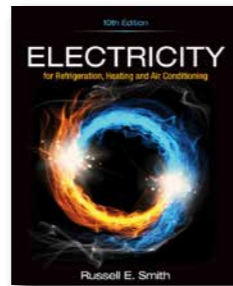
ELECTRICITY & CONTROLS

ELECTRICITY FOR REFRIGERATION, HEATING, AND AIR CONDITIONING, 10E

Russell E. Smith, Athens Technical College

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Master the electrical principles and practices you need to succeed as a professional installation and service technician with this trusted guide. Accurate and easy-to-understand, **ELECTRICITY FOR REFRIGERATION, HEATING AND AIR**

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THE COMPLETE HVAC LAB MANUAL FOR SILBERSTEIN/OBRZUT'S ELECTRICITY FOR REFRIGERATION, HEATING, AND AIR CONDITIONING, 10E

Eugene Silberstein, Suffolk County Community College, Brentwood, NY; Jason Obrzut, Content Developer, The ESCO Institute, Mount Prospect, IL

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Featuring over 250 lab exercises, this lab manual is designed to provide practice for all activities performed in the refrigeration, heating, and air conditioning industry, with exercises correlated to the following solutions: Refrigeration and Air

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15. Commercial and Industrial Systems (COM). Part 2: EXERCISE CORRELATIONS. Master Text Reference Guide. Electricity for Refrigeration, Heating and Air-Conditioning Lab Manual Exercise Number Cross Reference. Refrigeration and Air-Conditioning Technology Lab Manual and Workbook Exercise Number Cross Reference.

ELECTRICITY AND CONTROLS FOR HVAC-R, 7E

Stephen L. Herman, Lee College (retired); Sparkman

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Offering the most up-to-date coverage available, **ELECTRICITY AND CONTROLS FOR HVAC-R, 7e** emphasizes the basics as it equips you with the information needed to work effectively with all types of motors and control devices found in the heating and

air-conditioning industry. Extremely student friendly, the text requires no prior knowledge of electricity. It begins with discussions of essential basic electricity and electrical circuits concepts--ensuring thorough understanding before advancing to other topics. In addition, detailed schematic diagrams and step-by-step troubleshooting procedures highlight all of the different types of circuits commonly encountered in the HVAC-R field. The Seventh Edition is packed with vibrant photos, engaging illustrations, and coverage of the latest technology and developments from the field. It also reflects the current National Electrical Code® requirements.

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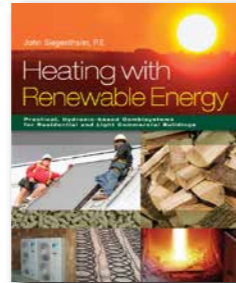
GENERAL & COMPREHENSIVE

HEATING WITH RENEWABLE ENERGY

John Siegenthaler, Associate Professor Emeritus, Mohawk Valley Community College, Utica, NY

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Learn how to merge renewable heat sources (such as solar thermal collectors, hydronic heat pumps, and wood-fired boilers) with the latest hydronics hardware and low temperature distribution systems to assemble efficient, reliable, and economically sustainable systems. The book is easy to understand and packed

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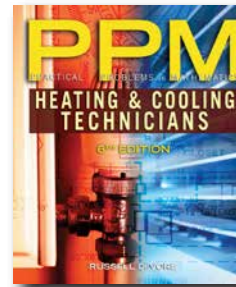
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PRACTICAL PROBLEMS IN MATHEMATICS FOR HEATING AND COOLING TECHNICIANS, 6E

Russell B. DeVore

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Practical Problems for Heating And Cooling Technicians, 6th Edition gives you the essential quantitative skills to get ahead in the HVAC field today! This text condenses critical mathematical theories into short, easily understood sections, and

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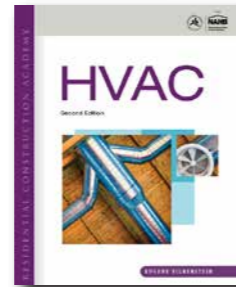
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RESIDENTIAL CONSTRUCTION ACADEMY HVAC, 2E

Eugene Silberstein, Suffolk County Community College, Brentwood, NY

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RESIDENTIAL CONSTRUCTION ACADEMY HVAC 2nd is a full color, comprehensive text for aspiring technicians, covering installation, startup and service of residential air conditioning and heating systems. The presentation of the material is detailed with step by step

procedures that clearly illustrate key skills needed to properly install a system. Full color illustrations of procedures have side by side descriptions to clarify the instructions. Topics covered include the installation and service of oil, gas, electric and geothermal heating systems as well as boilers, hydronic heating and radiant heating. Now available with this text is The Complete HVAC Lab Manual, which features over 250 lab exercises, covering 15 topic areas. See the supplements section for more details.

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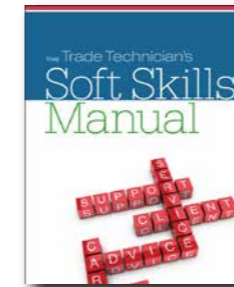
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THE TRADE TECHNICIAN'S SOFT SKILLS MANUAL

Steve Coscia

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Learning to express yourself in a positive and professional way can be an art-form. THE TRADE TECHNICIAN'S SOFT SKILLS MANUAL, teaches these important soft skills with line drawings, photographs, and anecdotes from real case

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HVACR 301

John Hohman

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ebook



A continuation of the solid skills development and strong theoretical knowledge established with HVACR 101 and HVACR 201, this third installment in the series guides readers through increasingly advanced concepts in the field. Like the rest of the series, HVACR 301 is backed by the

high standards and cutting-edge resources of the Air Conditioning Contractors of America (ACCA), Plumbing-Heating-Cooling Contractors – National Association Educational Foundation (PHCC Education Foundation), and Refrigeration Service Engineers Society (RSES). Coverage ranges from the troubleshooting of systems and components to concepts of fluid handling systems, cooling towers, and indoor air quality. With a building block approach that ensures readers comprehend simpler concepts before moving on to more complex information, this is the perfect resource for learning and applying advanced HVACR concepts. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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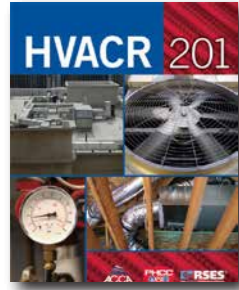
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HVACR 201

John E. Hohman, University of North Texas; Joseph Moravek, Nance Universal HVACR Technical School, Beaumont, Texas

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BTU BUDDY NOTEBOOK

Bill Johnson

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The BTU Buddy Notebook is a collection of more than 50 unique service call scenarios conducted by an HVAC technician which describe real-life service scenarios related to troubleshooting. Many high quality images help to illustrate troubleshooting techniques and the equipment being serviced.

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HVACR 101

Joseph Moravek, Nance Universal HVACR Technical School, Beaumont, Texas

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Designed to guide apprentices, entry-level technicians, and first-year students through their first experiences in the HVAC/R trade, HVAC 101 provides a solid and thorough introduction to the field. It is the culmination of the efforts of industry leaders like the Air Conditioning Contractors of America (ACCA),

PHCC Educational Foundation Plumbing Apprentice & Journeyman Training Committee (PHCC Educational Foundation), and Refrigeration Service Engineers Society (RSES). Backed by these organizations and the high standards and cutting-edge resources that they are known for, the book begins with simple concepts that provide an overview of the world of HVAC/R and its main systems and components. Coverage then progresses to increasingly complex procedures, such as maintenance and inspection, installation and repair, and customer service and sales. This building-block approach, combined with numerous practical examples, makes the book the ideal resource for learning and applying key HVAC/R concepts. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

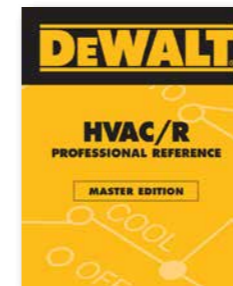
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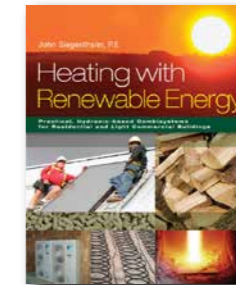
HEATING

HEATING WITH RENEWABLE ENERGY

John Siegenthaler, Associate Professor Emeritus, Mohawk Valley Community College, Utica, NY

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HEAT PUMPS, 2E

Eugene Silberstein, Suffolk County Community College, Brentwood, NY

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PRACTICAL PROBLEMS IN MATHEMATICS FOR HEATING AND COOLING TECHNICIANS, 6E

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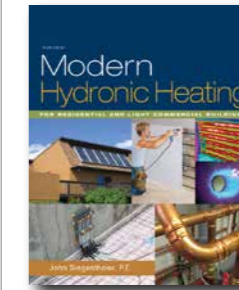
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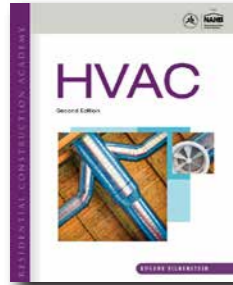
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RESIDENTIAL CONSTRUCTION ACADEMY HVAC, 2E

Eugene Silberstein, Suffolk County Community College,
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HVACR 301

John Hohman

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A continuation of the solid skills development and strong theoretical knowledge established with HVACR 101 and HVACR 201, this third installment in the series guides readers through increasingly advanced concepts in the field. Like the rest of the

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HVACR 201

John E. Hohman, University of North Texas; Joseph Moravek,
Nance Universal HVACR Technical School, Beaumont, Texas

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The second installment in a series of useful and resourceful guides, HVACR 201, continues to build upon the basics of the HVACR trade. The result of a joint effort by industry leading Air Conditioning Contractors of America (ACCA), PHCC Educational Foundation

Plumbing Apprentice & Journeyman Training Committee (PHCC Educational Foundation), and the Refrigeration Service Engineers Society (RSES), the book begins with simpler HVACR concepts and progresses into increasingly complex theories and skills. Starting with coverage of all of the important components of a system, the book advances to deal with topics in electrical, heating, motors, and cooling- then moving to troubleshooting and installation procedures. Theoretical knowledge is presented alongside practical, industry-relevant examples, allowing both entry-level technicians and 2nd year apprentices to easily learn and apply key HVACR concepts. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

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HVACR 101

Joseph Moravek, Nance Universal HVACR Technical School, Beaumont, Texas

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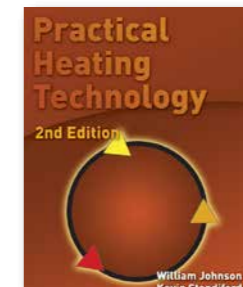
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PRACTICAL HEATING TECHNOLOGY, 2E

Bill Johnson; Kevin Standiford, Arkansas Teacher Retirement System, Little Rock, AR, Lead Program Analyst

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Newly expanded and updated to meet the needs of today's technicians, Practical Heating Technology, 2E offers comprehensive, in-depth coverage of modern heating theory, systems, and service. This book is the perfect on-site resource,

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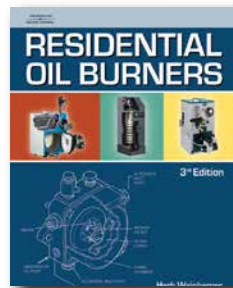
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RESIDENTIAL OIL BURNERS, 3E

Herb Weinberger

© 2008, 304pp, Paperback, 9781418073978

ebook



Packed with more need-to-know information than any other book on the market, Residential Oil Burners, 3E provides the knowledge and skills that residential oil burner technicians will need to succeed in the industry. Now in its third edition, the book has been fully updated

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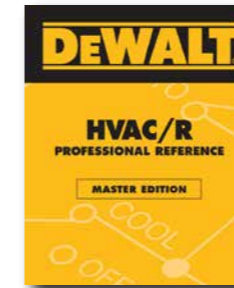
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Paul Rosenberg, Iowa State University; American Contractors Educational Services

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INDUSTRIAL TECHNOLOGY

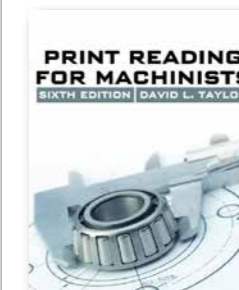
MACHINE TOOL

PRINT READING FOR MACHINISTS, 6E

David L. Taylor

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Master the basics of print interpretation! PRINT READING FOR MACHINISTS, Sixth Edition, is an ideal resource for machine trades students and apprentices alike who want to gain the knowledge and skills needed for career success. Now updated to

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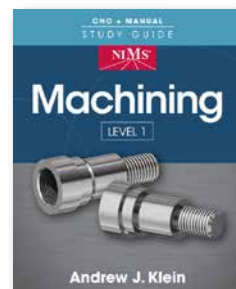
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NIMS MACHINING LEVEL 1 STUDY GUIDE

Andrew J. Klein, *Western Montgomery Career and Technology Center, Limerick, PA*

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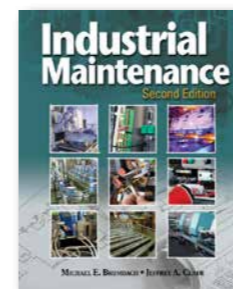
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INDUSTRIAL MAINTENANCE, 2E

Michael E. Brumbach, *York Technical College, Rock Hill, South Carolina*; Jeffrey A. Clade, *York Technical College, Rock Hill, South Carolina*

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INDUSTRIAL MAINTENANCE, Second Edition, provides a strong foundation in all five major areas of industrial maintenance, including general, mechanical, electrical, welding, and preventive maintenance. In addition to essential

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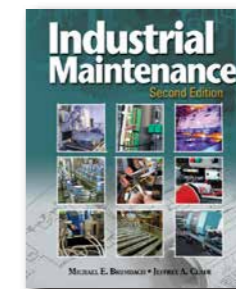
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BASIC BLUEPRINT READING AND SKETCHING, 9E

Thomas P. Olivo; C. Thomas Olivo

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For over 50 years, Basic Blueprint Reading and Sketching has been an international best-seller, with close to \$500,000 in sales and THE definitive resource for blueprint reading. The newly revised 9th edition of Basic Blueprint Reading and Sketching

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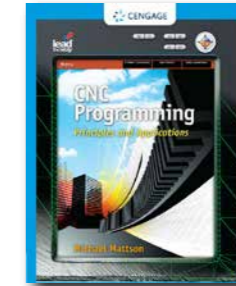
CNC PROGRAMMING

Principles and Applications

Mike Mattson

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A proven guide to computer-aided machining, CNC Programming: Principles and Applications has been revised to give readers the most up-to-date information on G- and M- code programming available today. This edition retains the book's comprehensive

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MECHANICAL TECHNOLOGY

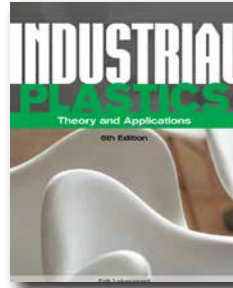
INDUSTRIAL PLASTICS, 6E

Theory and Applications

Erik Lokensgard, Eastern Michigan University, Ypsilanti, MI

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Now in its 6th edition, *Industrial Plastics: Theory and Applications* is back, with the extensive, detailed graphics and practical lab exercises that made previous editions so popular. In this latest edition, these trademark features accompany updated coverage of the plastics industry, offering

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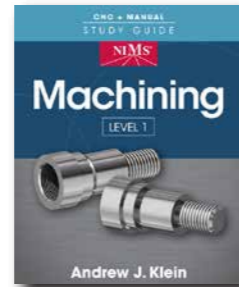
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NIMS MACHINING LEVEL 1 STUDY GUIDE

Andrew J. Klein, Western Montgomery Career and Technology Center, Limerick, PA

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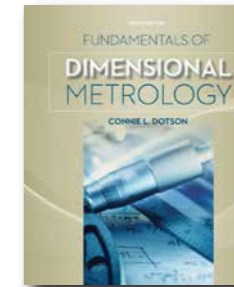
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Connie L. Dotson

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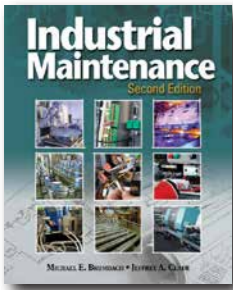
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Michael E. Brumbach, York Technical College, Rock Hill, South Carolina; Jeffrey A. Clade, York Technical College, Rock Hill, South Carolina

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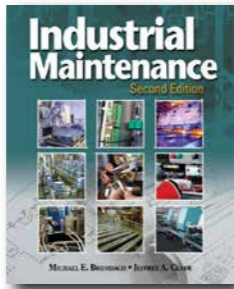
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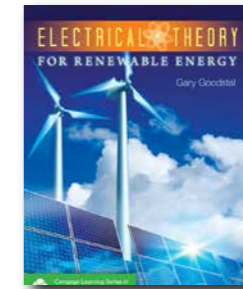
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ELECTRICAL THEORY FOR RENEWABLE ENERGY

Gary Goodstal

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Essential for anyone interested in a career in renewable energy, ELECTRICAL THEORY FOR RENEWABLE ENERGY presents a solid foundation of electrical theory and applications for both photovoltaic (PV) power and wind power in

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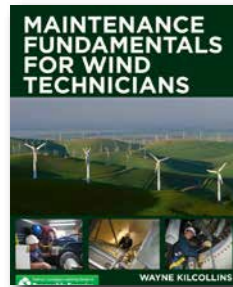
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Practical and easy to understand, MAINTENANCE FUNDAMENTALS FOR WIND TECHNICIANS provides a comprehensive introduction to the field of wind energy that is appropriate for any electrical or mechanical technician.

Through topics such as developing a preventative maintenance program, determining the performance of a wind turbine system, and monitoring improvement through system data analysis, this text teaches you the skills you need to be a successful wind energy technician. Safety-related practices, such as working at heights, tower rescue practices, and offshore projects, are emphasized to ensure that you understand the hazards associated with working in the wind industry. Study tools such as hands-on exercises, applications, troubleshooting tips, and learning objectives keyed to AWEA skills will help you learn everything you need to know to succeed in your class and successfully maintain, service, and troubleshoot turbines on wind farms.

CONTENTS

1. Introduction. 2. Tower Safety. 3. Workplace Safety. 4. Workplace Hazards. 5. Lubrication. 6. Fluid Power. 7. Bolting Practices. 8. Test Equipment. 9. Component Alignment. 10. Down Tower Area. 11. Tower. 12. Machine Head. 13. Drive Train Assembly. 14. Generator. 15. Rotor Assembly. 16. External Surfaces. 17. Developing a Preventative Maintenance Program. 18. Park Management Tools. Endnotes. Resource Materials. Index.

WIND TURBINE TECHNOLOGY

Ahmad Hemami, Iowa Lakes Community College

© 2012, 416pp, Paperback, 9781435486461

ebook



WIND TURBINE TECHNOLOGY, is a comprehensive and well illustrated book on the theory and operations of wind turbines that generate electricity for power companies. This text is written as an introduction to wind energy technology. It prepares

readers for a career as wind energy technicians who are responsible for maintaining, servicing and troubleshooting turbines on wind farms. This is an inclusive text that covers the main subjects associated with wind turbines. Dr. Hemami uses a practical, step-by-step manner with many examples and applications to help you to have a better understanding of the material. The book is divided into 17 progressive chapters. The book is divided into progressive sections, starting with fundamental subjects such as energy in the wind and effect of wind on a blade and continues onto more advanced materials such as grid connection and economics of wind turbines.

CONTENTS

1. Introduction. 2. Energy in the Wind. 3. Fundamentals. 4. Wind Turbine Basic Types, Analysis and Characteristics. 5. Propeller Wind Turbine. 6. Electricity and Electric generation. 7. Propeller-Type Wind Turbine Characteristics. 8. Grid Connection. 9. Wind turbine mechanical systems. 10. Control of Wind Turbines (Part 1: Mechanical Side). 11. Control of Wind Turbines (Part 2: Generator Side). 12. Ancillary Electric Devices. 13. Wind Turbine Mechanical Design Matters. 14. Economics of Wind Energy. 15. Environmental Concerns. 16. Safety and Other Issues. 17. Working on Wind Turbines and Operator's Safety. Appendices. Index.

BASIC BLUEPRINT READING AND SKETCHING, 9E

Thomas P. Olivo; C. Thomas Olivo

© 2010, 320pp, Paperback, 9781435483781

ebook



For over 50 years, Basic Blueprint Reading and Sketching has been an international best-seller, with close to \$500,000 in sales and THE definitive resource for blueprint reading. The newly revised 9th edition of Basic Blueprint Reading and Sketching

continues the traditions in helping to readers achieve competence in reading and sketching technical drawings. This classic interactive book/workbook will help users develop skills in reading and interpreting industrial drawings and preparing basic to advanced technical sketches. This book will provide them with basic principles, concepts, ANSI and SI Metric drafting symbols and standards, terminology, manufacturing process notes, and other related technical information contained on a mechanical or CAD drawing. Each unit features a basic principle and at least one blueprint and assignment that encourages students to practice newly learned skills. This edition contains coverage of the latest ANSI, ISO, AWS and ASME standards.

CONTENTS

Section 1 Lines. 1. Bases for Blueprint Reading and Sketching. 2. The Alphabet of Lines and Object Lines. 3. Hidden Lines and Center Lines. 4. Extension Lines and Dimension Lines. 5. Projection Lines and Line Combinations. Section 2 Views. 6. Three-View Drawings. 7. Arrangement of Views. 8. Two-View Drawings. 9. One-View Drawings. 10. Auxiliary Views. Section 3 Dimensions and Notes. 11. Size and Location Dimensions. 12. Dimensioning Cylinders, Circles, and Arcs. 13. Size Dimensions for Holes and Angles. 14. Location Dimensions for Points, Centers, and Holes. 15. Dimensioning Large Arcs and Base Line Dimensions. 16.

Tolerances: Fractional and Angular Dimensions. 17. Unilateral, Lateral, Decimal, Tolerances and Limits. 18. Interchangeable Parts, Allowances and Classes of Fit. 19. Representing and Dimensioning External Screw Threads. 20. Representing and Specifying Internal and Left-Hand Threads. 21. Dimensioning Tapers and Machined Surfaces. 22. Dimensioning with Shop Notes. Section 4 The SI Metric System. 23. Metric System Dimensioning and ISO Symbols. 24. First-Angle Projection and Dimensioning. 25. Metric Screw Threads, Dual Dimensioning, and Tolerancing. Section 5 Sections. 26. Cutting Planes, Full Sections, and Section Lining. 27. Half Sections, Partial Sections, and Full-Section Assembly Drawings. Section 6 Computer Numerical Control (CNC) Fundamentals. 28. Datums: Ordinate and Tabular Dimensioning. Section 7 Geometric Dimensioning and Tolerancing. 29. Geometric Dimensioning, Tolerancing, and Datum Referencing. Section 8 Computer Graphics Technology. 30. CADD/CAM/CIM and Robotics. Section 9 Specialty Drawings. 31. Welding Symbols, Representation, and Dimensioning. 32. Surface Developments and Precision Sheet Metal Drawings. Section 10 Working Drawings. 33. Detail Drawings and Assembly Drawings. Section 11 Sketching Lines and Basic Forms. 34. Sketching Horizontal, Vertical, and Slant Lines. 35. Sketching Curved Lines and Circles. 36. Sketching Irregular Shapes. 37. Sketching Fillets, Radii, and Rounded Corners and Edges. Section 12 Freehand Lettering. 38. Freehand Vertical Lettering. 39. Freehand Inclined Lettering. Section 13 Shop Sketching: Pictorial Drawings. 40. Orthographic Sketching. 41. Oblique Sketching. 42. Isometric Sketching. 43. Perspective Sketching. 44. Pictorial Drawings and Dimensions. Section 14 Sketching for CAD/CNC. 45. Two-Dimensional and Three-Dimensional CAD Sketching. 46. Proportions and Assembly Drawings. Glossary of Select Terms. INDEX.

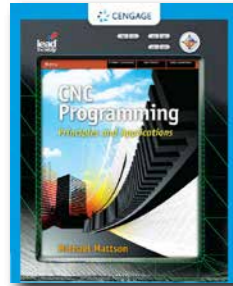
CNC PROGRAMMING

Principles and Applications

Mike Mattson

© 2010, 432pp, Hardback, 9781418060992

ebook



A proven guide to computer-aided machining, *CNC Programming: Principles and Applications* has been revised to give readers the most up-to-date information on G- and M- code programming available today. This edition retains the book's comprehensive yet concise approach, offering an overview of the entire manufacturing process, from planning through code writing and setup. The new edition includes expanded coverage of tooling, manufacturing processes, print reading, quality control, and precision measurement. Designed to meet the needs of both beginning machinists and seasoned machinists making the transition to the abstract realm of CNC, this book is a valuable resource that will be referred to again and again.

CONTENTS

Preface. 1. Computer Numerical Control of Machine Tools. 2. Measurement and Quality. 3. The NC Programming Process. 4. NC Tooling and Machining Processes. 5. Tool and Workpiece set-up. 6. Programming Concepts and Job Planning. 7. Codes for Positioning and Milling. 8. Basic Codes to Control Machine Functions. 9. Hole Making Cycles. 10. Tool Radius Compensation. 11. Advanced Programming Concepts. 12. Lathe Programming. 13. CAD/CAM. 14. Mathematics for NC Programming. Appendix A G & M Codes Reference. Appendix B Reference Information. Glossary.

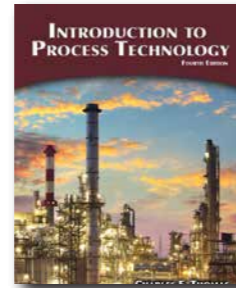
PROCESS TECHNOLOGY

INTRODUCTION TO PROCESS TECHNOLOGY, 4E

Charles E. Thomas, Ph.D., Lee College in Baytown, TX,

© 2016, 512pp, Paperback, 9781305251472

ebook



Suitable for both aspiring process technicians and active process technology professionals, this wide-ranging guide provides a thorough grounding in the history, science, technology, equipment, systems, operations, and troubleshooting principles associated with modern

manufacturing. Following years of widespread use and testing, *INTRODUCTION TO PROCESS TECHNOLOGY, Fourth Edition*, is a proven product featuring a logical sequence of topics—including safety, instrumentation, applied physics and chemistry, and quality control—aligned to the structure of accredited college courses and professional training programs. Technically accurate and up to date, the Fourth Edition remains affordable, reader-friendly, and highly visual, with ample illustrations and photographs to make complex technical concepts easier to understand and apply.

CONTENTS

Preface. 1. History of the Chemical Processing Industry. 2. Introduction to Process Technology. 3. Safety, Health, and Environment. 4. Applied Physics One. 5. Equipment One. 6. Equipment Two. 7. Process Instrumentation One. 8. Process Instrumentation Two. 9. Process Technology—Systems One. 10. Process Technology—Systems Two. 11. Industrial Processes. 12. Process Technology Operations. 13. Applied General Chemistry. 14. Applied Physics Two. 15. Environmental Standards. 16. Quality Control. 17. Process Troubleshooting. 18. Self-Directed Job Search. 19. Applied General Chemistry Two. 20. Chemical Process Industry Overview. Glossary. Index.

PROCESS TECHNOLOGY PLANT OPERATIONS, 2E

Michael Speegle, San Jacinto College

© 2016, 416pp, Paperback, 9781133950158

ebook



Addressing modern process plant operations in an easy-to-understand format, this comprehensive text reveals the important role technicians play in the function of a business unit. The author thoroughly examines operator responsibilities and functions, from recognizing opportunities that improve process operations, to detecting and removing threats to steady-state operation. The text also systematically explores business fundamentals and the importance of quality, as well as the chemistry and physics of process operations, maintenance duties, material handling, and process troubleshooting techniques. Now thoroughly expanded and updated, the Second Edition of this trusted text includes new chapters on jobs in process technology, environmental compliance, emergency response, and instrumentation. With numerous new and revised tables and photos, as well as additional learning resources to promote Internet research and critical thinking, the text is an even more useful and effective resource for current and future process plant technicians.

CONTENTS

Preface. 1. Process Technology Today. 2. Jobs in Process Technology. 3. John's Twelve-Hour Shift. 4. Safety. 5. Environmental Compliance and Title V. 6. Emergency Response Teams. 7. Process Physics for Operators. 8. Quality for Operators. 9. Economics for Operators. 10. Communication for Operators. 11. Instrumentation. 12. Routine Technician Duties. 13. Process Samples and common Analytical Tests. 14. Operator Maintenance Duties. 15. Material Handling of Bulk Liquids. 16. Material Handling of Bulk Solids. 17. Material Handling: Oil Movement and Storage.

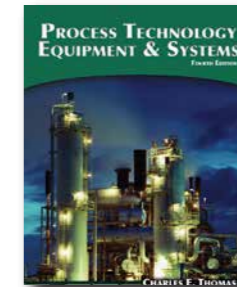
18. Process Unit Shutdown. 19. Process Unit Turnaround. 20. Process Unit Startup. 21. Abnormal Situations. 22. Process Troubleshooting. Glossary.

PROCESS TECHNOLOGY EQUIPMENT AND SYSTEMS, 4E

Charles E. Thomas, Ph.D., Lee College in Baytown, TX,

© 2015, 528pp, Paperback, 9781285444581

ebook



Developed by the recognized authority in the field, *PROCESS TECHNOLOGY EQUIPMENT AND SYSTEMS, 4e* introduces you to the concepts and techniques used in today's most sophisticated manufacturing facilities. This book delivers technical accuracy along with

an engaging writing style, and supports readings with full-color graphics and photos that show how systems and equipment operate in the real world. Chapters explore the workings of valves, vessels, and piping; pumps and compressors; motors and turbines; heat exchangers, cooling towers, boilers, and furnaces; reactors and distillation; extraction and separation systems; process instrumentation; and much more. Upholding the tradition of excellence established by the first two editions, *PROCESS TECHNOLOGY EQUIPMENT AND SYSTEMS, 4e* can help launch your career as a process technology technician!

CONTENTS

1. Introduction to Process Equipment. 2. Valves. 3. Piping and Vessels. 4. Pumps. 5. Compressors. 6. Turbines and Motors. 7. Heat Exchangers. 8. Cooling Towers. 9. Boilers. 10. Furnaces. 11. Instruments. 12. Process Diagrams. 13. Utility Systems. 14. Reactor Systems. 15. Distillation Systems. 16. Extraction and Other Separation Systems. 17. Plastics Systems.

SAFETY, HEALTH, AND ENVIRONMENTAL CONCEPTS FOR THE PROCESS INDUSTRY, 2E

Michael Speegle, San Jacinto College

© 2013, 384pp, Paperback, 9781133013471

ebook



Practical and easy to understand, SAFETY, HEALTH, AND ENVIRONMENTAL CONCEPTS FOR THE PROCESS INDUSTRY, Second Edition is an essential text for anyone who aspires to work in process technology.

Through a hands-on approach and direct writing style, the author succinctly covers all of the safety and regulatory issues essential to the industry. In addition, relevant topics such as OSHA regulations and analyzer technology are discussed in detail. Each chapter includes learning objectives, a list of the key terms, a chapter summary, and review questions. This thoroughly revised second edition also includes a chapter specific to OSHA and DOT, upgraded artwork, and relevant articles to enhance your understanding and demonstrate real world relevance.

CONTENTS

1. The Process Employee's Role in SH&E. 2. History of the Safety and Health Movement. 3. Workplace Accidents and the Human Factor. 4. Hazard Recognition. 5. Toxic Hazards. 6. Fire and Fire Hazards. 7. Process Hazards: Pressure, Steam, Electricity. 8. Noise and Vibration Hazards. 9. Hazards of Temperature. 10. Hazards of Process Sampling. 11. Control of Hazards: Engineering Controls. 12. Control of hazards: Administrative Controls. 13. Personal Protective Equipment (PPE). 14. Hazard Communication (HAZCOM). 15. Respiratory Protection. 16. Process Safety Management (PSM). 17. Permit Systems. 18. Hazardous Waste Operations (HAZWOPER). 19.

OSHA and DOT. 20. The Environmental Protection Agency. 21. Stress, Drugs and Violence. 22. Hurricanes, Plant Security. Glossary. Bibliography.

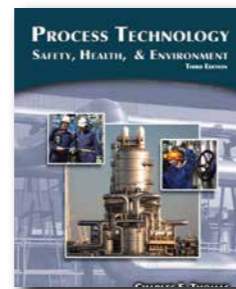
PROCESS TECHNOLOGY, 3E

Safety, Health, and Environment

Charles E. Thomas, Ph.D., Lee College in Baytown, TX,

© 2012, 320pp, Paperback, 9781111036355

ebook



A full range of safety, health and environmental issues that relate to the process industry are thoroughly covered in this newly updated text written with the reader in mind. The text is simply written and yet covers all the pertinent topics new to the field of the

process industry such as responding to the use of weapons of mass destruction, hurricanes, tornados, and other natural disasters. This revised edition provides a basic and well-illustrated overview of the field to acquaint the reader with safe and approved practices. Safety science and theory with process equipment and systems is integrated into the text with a strong relevance to the chemical industry. The text conforms closely to the course requirements as defined by Center for the Advancement of Process Technology making this a useful and an invaluable resource.

CONTENTS

1. Introduction to Process Safety. 2. Hazard Classification. 3. Routes of Entry and Environmental Effects. 4. Gases, Vapors, Particulates, and Toxic Metals. 5. Hazards of Liquids. 6. Hazardous Chemical Identification: Hazcom, Toxicology, and Dot. 7. Fire and Explosion. 8. Electrical, Noise, Heat, Radiation, Ergonomic, and Biological Hazards. 9. Safety Permit Systems. 10. Personal Protective Equipment. 11. Engineering Controls.

12. Administrative Controls. 13. Regulatory Overview: OSHA, PSM, EPA, NFDA, and DOT. 14. HAZWOPER. 15. Process System Hazards. 16. Weapons of Mass Destruction, Hurricanes, and Natural Disasters. Glossary. Index.

QUALITY CONCEPTS FOR THE PROCESS INDUSTRY, 2E

Michael Speegle, San Jacinto College

© 2010, 288pp, Paperback, 9781435482449

ebook



Quality Concepts for the Process Industry prepares readers for a career as process plant operators. This book covers the classical concepts of quality control in a style and at a depth that should be acquired by all employees of the process industries.

Each chapter of the text contains chapter objectives, thorough discussions of the concepts presented, a summary, and end-of-chapter review questions. There is a complete glossary of terms and a list of additional references in the back of the book.

CONTENTS

Preface. About the Author. 1. Why Quality is Important. 2. How It All Began. 3. The Quality Gurus. 4. ISO 9000 (2000). 5. Total Quality Management. 6. Customer Satisfaction. 7. Employee Empowerment. 8. Teamwork and Teams. 9. Communication. 10. Personal Effectiveness. 11. The Economics of Quality. 12. Quality as a System. 13. The Cost of Quality. 14. Quality Tools (Part 1). 15. Quality Tools (Part 2). 16. Variation. 17. Concepts of Statistical Quality Control. 18. SPC and Control Charts. 19. Process Capability. 20. Epilogue. Glossary. References. Subject Index.

PROCESS TECHNOLOGY TROUBLESHOOTING

Charles E. Thomas, Ph.D., Lee College in Baytown, TX,

© 2009, 352pp, Paperback, 9781428311008

ebook

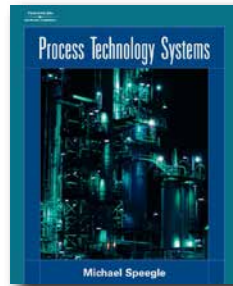
For the first time, process technicians have a resource designed specifically for them that will provide a comprehensive, thorough overview of modern troubleshooting methods and models. Process Technology Troubleshooting utilizes a simple to complex approach that encourages readers to master basic concepts before progressing to more advanced ones for increased comprehension. The book covers troubleshooting models that apply concepts from advanced instrumentation, the control loop, and process equipment and systems, and includes coverage of such processes as a simple pump-around and feed system, compressor system, heat transfer system, cooling tower system, boiler system, furnace system, distillation system, stirred reactor system, and separations system. Each of these systems have operational information, set points, and start-up procedures. These sections include "what-if" scenarios and detailed illustrations. Process Technology Troubleshooting is an invaluable resource and reference for any novice, training manager or experienced process technician.

PROCESS TECHNOLOGY SYSTEMS

Michael Speegle, San Jacinto College

© 2008, 400pp, Paperback, 9781418039998

ebook



Process Technology Systems uses a straightforward approach to address the various systems in the processing industry, starting with the most common, such as cooling water, wastewater, and steam, and then progressing to less common concepts

such as crystallization and extraction. Each chapter has a small line drawing or P&ID (Piping and Instrumentation Diagram) of the system under discussion and photos of some of the equipment, providing readers with visual references as they go. Each topic is covered in-depth, and features important information on its safety implications, as well as troubleshooting. With completely up-to-date information and technology, this book will help readers grasp the fundamentals of all the main process technology systems, as well as the importance of each system for meeting production schedules and determining quality of products and efficiency.

CONTENTS

Preface 1. The Concept of a System 2. Overview of Industrial Water Treatment 3. Water Systems I: Process Wastewater, Fire Water and Storm Water 4. Water Systems II: Potable Water, Process Water and Demineralized Water 5. Cooling Water and Cooling Tower System 6. Nitrogen, Plant Air and Instrument Air Systems 7. Natural Gas and Fuel Gas Systems 8. Steam Generation and Boiler Feedwater System 9. Steam Distribution and Condensate Recovery System 10. Electrical System 11. Relief and Flare Systems 12. Refrigeration System 13. Distillation System 14. Combustion Systems 15. Extraction and Filtration Systems 16. Adsorption Systems 17. Absorption and Stripping Systems 18. Reaction Systems 19. Centrifugation Systems 20.

Crystallization Systems 21. Filtration Systems 22. Drying Systems 23. Material Storage and Blending Systems 24. Environmental Compliance Systems Glossary Bibliography

PLUMBING

PLUMBING

BASIC PLUMBING SERVICES SKILLS, 3E

Dean Carter, TAFE NSW- Miller College

© 2017, 444pp, Paperback, 9780170361972

ebook



The Plumbing Skills series provides you with the knowledge, skills and awareness you need to be successful in the plumbing industry. The series is structured to build step-by-step knowledge, working from general/foundation subjects towards more

specific and technical detail as you progress. It develops problem-solving skills, combining safe work practices with professional skills and a thorough understanding of how and why things are done in a certain way. - Work Health and Safety (WHS) boxes identify critical points for concern - Sustainability boxes lead on up-to-date environmental information - Employability boxes outline the responsibilities of employees, including skills they need to acquire and real-life challenges they may face at work References to AS/NZS 3500:2015, referred to in the Plumbing Code of Australia, prompts familiarity with the codes throughout your training.

CONTENTS

1. Work health and safety 2. Work effectively in the plumbing and services sector 3. Carry out

interactive workplace communication 4. Read plans and calculate plumbing quantities 5. Handle and store plumbing materials 6. The tools of the plumbing trade 7. Cut and join sheet metal 8. Mark out materials 9. Welding using oxyacetylene and arc welding equipment

BASIC PLUMBING SERVICES SKILLS: ROOF PLUMBING, 2E

Owen Smith, TasTAFE

© 2017, 442pp, Spiral, 9780170380393

ebook



Elevate your learning! This text is completely mapped to the CPC08 Construction, Plumbing and Services training package, and now updated to meet SA HB39-2015 'Installation Code for Metal Roof and Wall Cladding' and AS/NZS 3500.3:2015 'Stormwater

Drainage' standards. The new chapter on Design and Size Roof Drainage System addresses the CPCPRF4011B unit (Chapter 19), particularly in regard to the Certificate IV qualification. Includes: - CPCPCM2043A – Carry out WHS requirements - CPCPCM2040A – Read plans and calculate plumbing quantities - CPCPRF3022A – Fabricate and install roof drainage components - CPCPRF3021A – Receive roofing materials - CPCPRF3026A – Install composite roof systems - CPCPRF2022A – Select and install roof sheeting and wall cladding - CPCPRF3023A – Fabricate and install external flashings - CPCPCM3021A – Flash penetrations through roofs and walls - CPCPRF3024A – Install roof components - CPCPRF3025A – Install roof coverings to curved roof structures - CPCPRF2023A – Collect and store roof water - CPCPRF4011B – Design and size roof drainage systems The Plumbing Skills series provides you with the knowledge, skills and awareness you will need to be successful in the plumbing industry. The series is structured to build step-by-step knowledge,

working from general/foundation subjects towards more specific and technical detail as you progress. It develops problem-solving skills, combining safe work practices with professional skills and a thorough understanding of how and why things are done in a certain way. References to AS/NZS 3500:2015, referred to in the Plumbing Code of Australia, prompts familiarity with the codes throughout your training.

CONTENTS

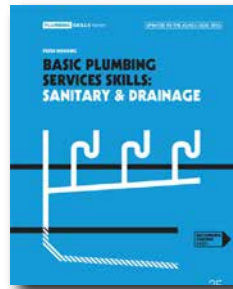
1. Overview of roof plumbing 2. Types of roof structure 3. Basic roof safety 4. Asbestos 5. Material types 6. Fasteners and sealants 7. Capillary action 8. Corrosion 9. Roof plumbing tools 10. Fabricate and install roof drainage components 11. Receive roofing materials 12. Install composite roof system 13. Select and install roof sheeting and wall cladding 14. Fabricate and install external flashings 15. Flash penetrations through roofs and walls 16. Install roof components 17. Install roof coverings to curved roof structures 18. Collect and store roof water 19. Design and size roof drainage systems NEW

BASIC PLUMBING SERVICES SKILLS: SANITARY & DRAINAGE, 2E

Peter Wenning, Chisholm Institute

© 2017, 432pp, Paperback, 9780170362009

ebook



An introduction to the knowledge and fundamental skills you need in the sanitary and drainage areas. End-of-chapter theoretical and practical tasks enable you to demonstrate your understanding of key topics and to engage in practical

tasks. Regular WHS references focus on important issues faced in the industry and the workplace. This 2nd edition has been updated to meet the requirements of the AS/NZS 5601:2013 standards and the training requirements from the CPC Training Package. Includes: - CPCPCM2047A Carry out levelling - CPCPSN3011B Plan layout of a residential sanitary plumbing system - CPCPSN3022A Install discharge pipes - CPCPSN3023A Fabricate and install sanitary stacks - CPCPSN3024A Install and fit off sanitary fixtures - CPCPSN3025A Install pre-treatment facilities - CPCPSN3026A Install sewerage pumpsets - CPCPDR2021A Locate and clear blockages - CPCPDR2022A Install domestic treatment plants - CPCPDR2024A Install stormwater and sub-soil drainage systems - CPCPDR2025A Drain work site - CPCPDR2026A Install prefabricated inspection openings and enclosures - CPCPDR3021A Plan layout of a residential sanitary drainage system - CPCPDR3022A Install below-ground sanitary drainage system - CPCPDR3023A Install on-site disposal systems The Plumbing Skills series provides you with the knowledge, skills and awareness you will need to be successful in the plumbing industry. It develops problem-solving skills, combining safe work practices with professional skills and a thorough understanding of how and why things are done in a certain way.

WHS boxes identify critical points for concern; Sustainability boxes lead on up-to-date environmental information; and Employability boxes outline the responsibilities of employees. References to AS/NZS 3500:2015, referred to in the Plumbing Code of Australia, prompts familiarity with the codes throughout your training.

CONTENTS

1. Introduction to managerial accounting 2. Basic managerial accounting concepts 3. Cost behaviour 4. Job-order costing 5. Process costing 6. Activity-based costing 7. Master budget and behavioural issues 8. Standard costing: a managerial control tool 9. Flexible budgets and overhead analysis 10. Resource management 11. Cost-volume-profit analysis: a managerial planning tool 12. Short-run decision making: relevant costing 13. Long-run decision making 14. Performance evaluation, decentralisation, transfer pricing and rewards systems 15. Environmental and social management accounting: its contribution to business sustainability

BASIC PLUMBING SERVICES SKILLS: GAS SERVICES, 2E

Owen Smith, TasTAFE

© 2016, 448pp, Paperback, 9780170361996

ebook



Become a competent, knowledgeable gas plumber. Employability boxes outline your responsibilities, including skills you need to acquire and real-life challenges you may face at work. You will learn better with help from the companion website

featuring additional study and revision tools, including worksheets, weblinks, crosswords and more. Addresses AQF Level 3 competencies of the Construction, Plumbing and Services Training Package (CPC08), and covers new Australian Industry Standard AS/NZS 5601:2013. Includes: - CPCPGS3046A: Install LPG systems in caravans, mobile homes and mobile workplaces - CPCPGS3047A: Install LPG systems in marine craft - CPCPGS3048A: Install gas pressure control equipment - CPCPGS3049A: Install Type A gas appliance flues - CPCPGS3051A: Purge consumer piping - CPCPGS3053A: Disconnect and reconnect Type A gas appliances - CPCPGS3054A: Calculate and install natural ventilation for Type A gas appliances - CPCPGS3056A: Install gas piping systems - CPCPGS3057A: Size consumer gas piping systems - CPCPGS3059A: Install LPG storage of aggregate storage capacity up to 500 litres - CPCPGS3061A: Install and commission Type A gas appliances - CPCPGS3050A: Install Type B gas appliance flues - CPCPGS3052A: Maintain Type A gas appliances - CPCPGS3055A: Install gas sub-meters - CPCPGS3060A: Install LPG storage of aggregate storage capacity exceeding 500 litres and less than 8KL The Plumbing Skills series provides you with the knowledge, skills and awareness you will need to be successful in the plumbing industry. The series is structured to build step-by-step knowledge,

working from general/foundation subjects towards more specific and technical detail as you progress. References to AS/NZS 3500:2015, referred to in the Plumbing Code of Australia, prompts familiarity with the codes throughout your training.

CONTENTS

Part A: Gas fundamentals 1. Fuel gases 2. Gas industry terms and units of measurement 3. Gas distribution systems 4. Gas constituents and characteristics 5. Gas industry workplace safety 6. Combustion principles 7. Basic gas control systems 8. Meters 9. LPG basics Part B: Installation practice 10. Materials, components and pipe sizing 11. Piping systems 12. Purging a large volume gas installation 13. Appliance installation and maintenance 14. Ventilation requirements 15. Flueing 16. LPG installations 17. Caravan and marine gas installation 18. Planning a gas installation

BASIC PLUMBING SERVICES SKILLS: WATER SUPPLY, 3E

Anthony Pingnam

© 2016, 288pp, Paperback, 9780170361989

ebook



Basic Plumbing Service Skills: Water Supply, 3e is the second textbook in the Plumbing Skills Series. Basic Plumbing Service Skills: Water Supply, 3e builds on the basic skills, knowledge and understanding introduced in Basic Plumbing Services

Skills, 3e. Fully updated to current industry practices, this edition covers both 'common' and 'water' stream competencies in the CPC Construction, Plumbing and Services Training Package. The knowledge and skills derived from this text provides students with the tools for future learning and prepares new and existing workers for a long and rewarding career in the industry. Basic Plumbing Service Skills: Water Supply, 3e covers the following units of competency: • CPCPCM3023A Fabricate and install non-ferrous pressure piping • CPCPWT3020A Connect and install storage tanks to a domestic water supply • CPCPWT3021A Set out and install water services • CPCPWT3022A Install and adjust water service controls and devices • CPCPWT3023A Install an commission water heating systems • CPCPWT3025A Install water pumpsets • CPCPWT3026A Fit off and commission heated and cold water services • CPCPWT3027A Connect irrigation systems from drinking water supply • CPCPWT3028A Install water services The Plumbing Skills series provides learners with the knowledge, skills and awareness they need to be successful in the plumbing industry. It develops problem-solving skills, combining safe work practices with professional skills and a thorough understanding of how and why things are done in a certain way. WHS boxes identify critical points for concern; Sustainability boxes lead on up-to-date environmental information; and Employability boxes

outline the responsibilities of employees. References to AS/NZS 3500:2015, referred to in the Plumbing Code of Australia, prompts familiarity with the codes throughout their training.

CONTENTS

Introduction: Properties of water 1. Fabricate and install non-ferrous pressure piping (Common materials used in the supply of water) 2. Install water services (Main to meter) 3. Set out and install a water service (Meter to points of discharge) 4. Install water service controls and devices (Valves and ancillaries) 5. Install and commission water heating systems (Hot water) 6. Fit off and commission heated and cold water services (fit out) 7. Install water pump sets 8. Connect and install storage tanks to a domestic water supply 9. Backflow prevention and cross-connection (Connection of irrigation systems from a drinking (potable) water supply)

HEAT PUMPS

Skills2Learn Renewable Energy Workbook
Skills2Learn

© 2014, 192pp, Paperback, 9781408064665

ebook



Developed in partnership between Skills2Learn and Cengage Learning, this highly interactive workbook can be used as a resource tool for all introductory renewable energy vocational qualifications and apprenticeships. This unique workbook is

designed to consolidate learners' theoretical knowledge prior to undertaking practical workshop exercises. Heat Pumps provides learners with a thorough insight into renewable energies including the different types of heat and electricity producing technologies, the selection process, incentives and government policies. Part of the Renewable Energy Series, this unique write-in workbook can also be used alongside the Skills2Learn Heat Pumps virtual reality e-learning programme making this a first-of-its-kind, fully integrated blended learning solution.

CONTENTS

Chapter 1 – Introduction Chapter 2 – Health and Safety Chapter 3 – Heat Pump Types Chapter 4 – Ground Source Collectors Chapter 5 – Air Source Collectors Chapter 6 – System Design Chapter 7 – Installation Chapter 8 – Testing, Commissioning and Handover Chapter 9 – End Test

SOLAR THERMAL HOT WATER

Skills2Learn Renewable Energy Workbook
Skills2Learn

© 2014, 192pp, Paperback, 9781408064689

ebook



Developed in partnership between Skills2Learn and Cengage Learning, this highly interactive workbook can be used as a resource tool for all introductory renewable energy vocational qualifications and apprenticeships. This unique workbook is

designed to consolidate learners' theoretical knowledge prior to undertaking practical workshop exercises. Solar Thermal Hot Water provides learners with a thorough insight into solar thermal hot water technology including design principles, health and safety issues, performance calculations and installation, commissioning and handover. Part of the Renewable Energy Series, this unique write-in workbook can also be used alongside the Skills2Learn Solar Thermal Hot Water virtual reality e-learning programme making this a first-of-its-kind, fully integrated blended learning solution.

CONTENTS

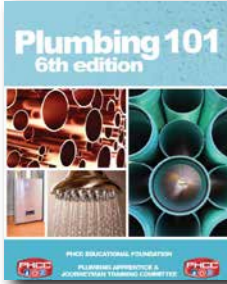
1. Introduction 2. Health and Safety 3. Solar Collector Types and British and International Standards 4. Solar Thermal Store Options 5. Solar Thermal Primary Circuit Designs 6. Solar Thermal Primary Circuit Controls 7. Installation Materials and Fittings 8. Filling, Commissioning and Maintenance 9. End Test

PLUMBING 101, 6E

PHCC Educational Foundation Plumbing Apprentices & Journeyman Training Committee

© 2013, 320pp, Paperback, 9781133281535

 CENGAGE | MINDTAP *ebook*



When you expect simple, straightforward explanations for real-world plumbing scenarios, look no further than PLUMBING 101, 6th EDITION. This book is the first-year title in a four-year series of plumbing apprentice training books developed in

partnership with the Plumbing-Heating-Cooling Contractors (PHCC) Educational Foundation. The series takes a spiral approach to address critical plumbing concepts, in which topics are introduced in the first year book, and are revisited in more detail in subsequent books in the series. This is ideal for anyone new to the field, as it mimics the most common learning experience: as plumbing apprentices and professionals gain more field experience, they gain more in-depth knowledge. This first book encompasses both residential and commercial plumbing, with core content centering around basic plumbing principles and codes. Updates to the sixth edition include new sections on brazing safety procedures and water heaters, expanded content on plumbing rough-in practices and career path possibilities, and updates throughout to reflect emerging topics and technology in the plumbing field. The end result is a foundational book for new plumbing apprentices or professionals with more value than ever. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

CONTENTS

1. Plumbing History, Codes, and Principles. 2. Tools of the Plumbing Trade. 3. First Aid and Safety. 4. Basic Math for Plumbing. 5. Water Supply, Water Sources, Waste Disposal, and Sewage Disposal. 6. Mechanical Properties and Protection of Building Materials and Structures. 7. Piping Materials Used in Plumbing Work. 8. Joining Methods for DWV and Pressure Piping. 9. Squares, Square Roots, and Basic Geometry. 10. Plumbing Fixtures. 11. Faucets and Related Devices. 12. Valves. 13. Water Heaters. 14. Building Plans, Drawings, and Scale Rulers. 15. Sketching.

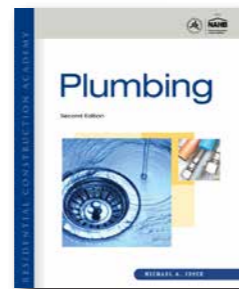
RESIDENTIAL CONSTRUCTION ACADEMY, 2E

Plumbing

Michael A. Joyce; Ray Holder

© 2012, 640pp, Hardback, 9781111307776

 *ebook*



RESIDENTIAL CONSTRUCTION ACADEMY: PLUMBING, 2E is the ideal book to create a direct link between your education/training program and the residential construction industry. The result of a strategic partnership between the

National Association of Home Builders (NAHB) Home Builders Institute and Delmar, Cengage Learning, the Residential Construction Academy Series is the perfect way to learn essential workplace skills for readers new to the building trades. Written in partnership with the Home Builders Institute, and endorsed by NAHB, RESIDENTIAL CONSTRUCTION ACADEMY: PLUMBING, 2E provides a step-by-step approach to residential plumbing installations based on national skill standards. Focusing on “Green” advancement in the plumbing trades, this book thoroughly explains the process of installing

residential plumbing systems by exploring topics such as tools of the trade and proper safety measures and by offering various tips to increase readers’ on-the-job productivity. Logically organized to build a foundation of knowledge, this book progresses from the installation of common fixtures to troubleshooting techniques that will aid readers. An emphasis on creative layout and the importance of understanding code variations will foster readers’ understanding of plumbing system installation that is based on typical situations as well as unique jobsite conditions.

CONTENTS

1. Tools and Materials. 2. Hand Tools. 3. Power Tools. Pipe. Fittings. 4. Valves and Device. 5. Fixtures and Equipment. 6. Fixtures. 7. Faucets and Drain Assemblies. 8. Equipment Layout and Installation. 9. Blueprint Reading and Drafting. 10. Layout and Material Organization. 11. Water Service Installation. 12. Water Distribution Installation. 13. Drainage Waste and Vent Segments. 14. Drainage Waste and Vent Installation. 15. Fixture and Equipment Installation. 16. Troubleshooting. 17. Plumbing Repairs and Troubleshooting. 18. Hydronic Heating Systems.

BLUEPRINT READING AND DRAFTING FOR PLUMBERS, 2E

Michael A. Joyce

© 2009, 240pp, Paperback, 9781428335134

 *ebook*



With a one-of-a-kind approach that offers more comprehensive coverage than any other plumbing apprentice book on the market, this valuable resource will thoroughly prepare readers for the transition from the residential plumbing

industry to commercial or industrial projects. Blueprint Reading and Drafting for Plumbers, 2E goes beyond basic lessons on reading and drafting various piping arrangements to provide highly detailed, practical, and relevant information that addresses the real-life demands of commercial and industrial job sites. This updated edition features all-new chapters devoted to coordinating plumbing installations using structural steel and civil blueprints, further enhancing the book’s unique and jobsite-focused classroom lessons.

CONTENTS

Chapter 1: Blueprint Symbols and Abbreviations
Chapter 2: Drafting Tools
Chapter 3: Architectural Blueprints and Project Documents
Chapter 4: Structural Steel and Civil Blueprints
Chapter 5: Isometric Introduction and View Comparisons
Chapter 6: Shop Drawings
Chapter 7: Riser Diagrams
Chapter 8: Drafting Practice
Appendix A: Abbreviations and Mathematical Tables
Appendix B: Common Plumbing Fittings

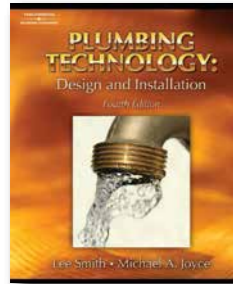
PLUMBING TECHNOLOGY, 4E

Design and Installation

Lee Smith; Michael A. Joyce

© 2008, 576pp, Hardback, 9781418050917

ebook



Prepare for a career in the commercial or residential plumbing fields with this popular book, which has been updated to reflect the very latest advancements in the plumbing industry. Plumbing Technology: Design and Installation, 4E has also been

restructured to begin with instruction on the major, introductory concepts, and then progressing to more specific, advanced lessons, allowing readers a complete and thorough understanding of the material. This edition includes coverage of the very latest products, tools, codes, and drain cleaning equipment that have had a remarkable impact on the plumbing industry and how plumbers work successfully. The latest water heater technology, such as Flammable Vapor Ignition Resistant heaters, DWV system segments and sizing, new safety regulations, and all relevant code changes are also addressed.

CONTENTS

Chapter 1 Plumbing Basics Chapter 2 Safety Chapter 3 Pipe, Valves, and Fittings Chapter 4 Blueprint Reading and Drafting Chapter 5 Trade Math and Formulas Chapter 6 Fixture Types Chapter 7 Faucets and Drain Assemblies Chapter 8 Fixture Installation Chapter 9 Introduction to Water Supply Chapter 10 Water Supply Installations Chapter 11 Water Heater Theory and Principles Chapter 12 Water Heater Types and Installations Chapter 13 Water Heater Devices Chapter 14 DWV System Identification Chapter 15 DWV Layout Considerations Chapter 16 Drainage, Waste and Vent Systems Chapter 17 Roof Drain Systems and Sewer and Drain Cleaning Chapter 18 Sizing Drainage, Waste, and Vent Systems Chapter 19 Sizing Natural Gas Piping, Water Piping, and Water Heaters

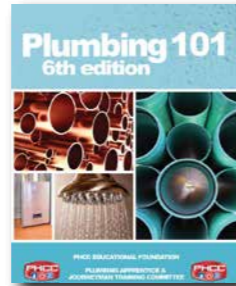
PROFESSIONAL PLUMBING

PLUMBING 101, 6E

PHCC Educational Foundation Plumbing Apprentice & Journeyman Training Committee

© 2013, 320pp, Paperback, 9781133281535

CENGAGE | MINDTAP ebook



When you expect simple, straightforward explanations for real-world plumbing scenarios, look no further than PLUMBING 101, 6th EDITION. This book is the first-year title in a four-year series of plumbing apprentice training books developed in

partnership with the Plumbing-Heating-Cooling Contractors (PHCC) Educational Foundation. The series takes a spiral approach to address critical plumbing concepts, in which topics are introduced in the first year book, and are revisited in more detail in subsequent books in the series. This is ideal for anyone new to the field, as it mimics the most common learning experience: as plumbing apprentices and professionals gain more field experience, they gain more in-depth knowledge. This first book encompasses both residential and commercial plumbing, with core content centering around basic plumbing principles and codes. Updates to the sixth edition include new sections on brazing safety procedures and water heaters, expanded content on plumbing rough-in practices and career path possibilities, and updates throughout to reflect emerging topics and technology in the plumbing field. The end result is a foundational book for new plumbing apprentices or professionals with more value than ever. Check out our app, DEWALT® Mobile Pro™. This free app is a construction calculator with integrated reference materials and access to hundreds of additional calculations as add-ons. To learn more, visit dewalt.com/mobilepro.

CONTENTS

1. Plumbing History, Codes, and Principles. 2. Tools of the Plumbing Trade. 3. First Aid and Safety. 4. Basic Math for Plumbing. 5. Water Supply, Water Sources, Waste Disposal, and Sewage Disposal. 6. Mechanical Properties and Protection of Building Materials and Structures. 7. Piping Materials Used in Plumbing Work. 8. Joining Methods for DWV and Pressure Piping. 9. Squares, Square Roots, and Basic Geometry. 10. Plumbing Fixtures. 11. Faucets and Related Devices. 12. Valves. 13. Water Heaters. 14. Building Plans, Drawings, and Scale Rulers. 15. Sketching.

REFERENCE

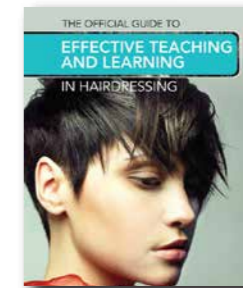
REFERENCE

THE OFFICIAL GUIDE TO EFFECTIVE TEACHING AND LEARNING IN HAIRDRESSING

Elaine White, Training and Educational Consultant; Jane Goldsbro, Director of Standards and Qualifications at the Hairdressing and Beauty Industry Authority (Habia)

© 2013, 128pp, Paperback, 9781408072660

ebook



This essential timesaving tool is fully endorsed by Habia and offers Trainee Hairdressers and Fulltime Practitioners advice on ensuring their teaching is interesting, inspiring and motivational for all hairdressing learners. This book motivates readers to

question the teaching and learning techniques they currently use and offers new, constructive ways for the educator to improve the quality of their teaching to hairdressing students. Readers will learn how to deliver a range of different teaching methods that can be used for starter activities and main programme content, all in the context of hairdressing learning and mapped to the hairdressing curriculum. Readers will also have access to a free online companion website offering downloadable templates and text to help prepare for lessons and plan the delivery of the hairdressing curriculum to learners of all ages in any learning environment. This book is suitable for all awarding associations, ensuring students have everything they need to pass their course.

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1. Introduction to teaching and learning in the hairdressing industry Communication skills for teachers Professionalism in the learning environment Safeguarding for children and learners Dealing with

learner disruptions Mentoring and being mentored Continuing professional development requirements for hairdressing Development checklist 2. How learners learn Learning theories Applying the theories Using the theory of behaviourism Using the theory of cognitivism Using the theory of constructivism Using the theory of humanism Preferred learning Learning styles Applying Gardner's separate intelligences for hairdressing Impact of learning psychologies and learning styles Dyslexia in the hairdressing industry Teaching and learning for learners with dyslexia Development checklist 3. How to plan for teaching and learning in hairdressing The planning process Curriculum planning Completing a scheme of work Lesson planning Development checklist 4. Teaching and learning strategies and methods Teaching and learning strategies and methods Teaching strategies Teaching and learning methods Using experimental learning Using relating theory to practice and practice to theory Using multi-sensory learning Using modelling Using learning conversations Using e-learning and technology Teaching and learning activities A menu for teaching and learning Embedding differentiated learning Differentiation and learning outcomes Development checklist 5. Assessment methods and techniques Why assess? Recording the results of assessment Initial assessment Formative assessment and assessment for learning Applying assessment for learning techniques Taking assessment for learning further Summative assessment and assessment of learning Qualifications for the hairdressing industry Realistic Learning Environment (RLE) criteria for VRQ delivery NVQ/SVQ delivery Development checklist 6. Successful starts and evaluative ends The importance of successful starts for teaching and learning The importance of evaluative plenaries for teaching and learning Periodic plenaries Benefits of using activities as session starters and for evaluation Starter and plenary activities Teacher or self-evaluation

RENEWABLE ENERGY

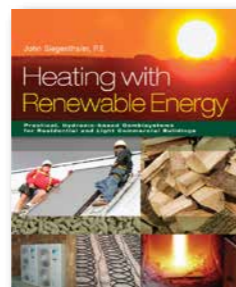
RENEWABLE ENERGY

HEATING WITH RENEWABLE ENERGY

John Siegenthaler, Associate Professor Emeritus, Mohawk Valley Community College, Utica, NY

© 2017, 864pp, Hardback, 9781285075600

ebook



Learn how how to merge renewable heat sources (such as solar thermal collectors, hydronic heat pumps, and wood-fired boilers) with the latest hydronics hardware and low temperature distribution systems to assemble efficient, reliable, and

economically sustainable systems. The book is easy to understand and packed with full color illustrations that provide detailed piping and control schematics and "how to" information you'll use on every renewable energy system. To help you understand how common hardware operates and how to select it, the author starts with basic building blocks, turns mathematical treatments of technical issues into easy-to-use tools, and concludes with complete renewable energy system designs that show the synergy of detail and function possible with state-of-the-art hardware and design methods. Using this one-of-a-kind book, you'll diversify your expertise over a wide range of heat sources.

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Preface. 1. Residential Energy Basics. 2. Space Heating & Domestic Water Heating Loads. 3. Universal Hydronic Concepts. 4. Essential Hydronic Hardware & Detailing. 5. Low Temperature Heat Emitters. 6. Electrical & Electronic Controllers. 7. Solar Energy Fundamentals. 8. Solar Thermal Collectors. 9. Thermal Storage Tanks. 10. Antifreeze-Protected Solar Combisystems. 11. Drainback Protected Solar Combisystems. 12.

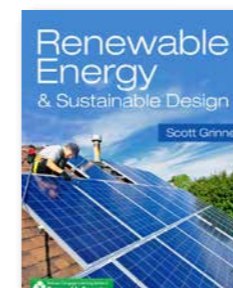
Assessing Solar Combisystem Performance. 13. Air-To-Water Heat Pump Systems. 14. Geothermal Heat Pump Systems. 15. Wood-Fired Heating Systems. 16. Economic Evaluation Concepts & Tools. Appendices. Glossary. Index.

RENEWABLE ENERGY & SUSTAINABLE DESIGN

Scott Grinnell, Northland College

© 2016, 400pp, Hardback, 9781111542702

ebook



Featuring current information and a practical approach, RENEWABLE ENERGY AND SUSTAINABLE DESIGN combines common forms of renewable energy with green building practices, offering an exciting and engaging introduction to

this field. Focusing on both the theory and practice of producing electrical energy from non-fossil fuel sources, this book evaluates different types of building materials and design options while assessing available forms of renewable energy--including solar, wind, hydro, biomass, tidal and geothermal. By examining the benefits and limitations involved in harnessing each of these renewable energies, this book seeks to provide you with an objective and informed viewpoint, with the ultimate purpose of minimizing harmful impacts on individuals, communities, and the environment.

CONTENTS

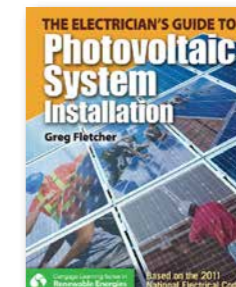
1. Introduction to Green Building. 2. Building Materials. 3. Passive Solar Design. 4. Alternative Construction. 5. Energy. 6. Solar Hot Water. 7. Solar Electricity. 8. Wind Power. 9. Hydropower. 10. Biomass. 11. Non-Solar Renewable Energy.

THE GUIDE TO PHOTOVOLTAIC SYSTEM INSTALLATION

Gregory W. Fletcher, Kennebec Valley Community College

© 2014, 352pp, Paperback, 9781111639969

CENGAGE | MINDTAP ebook



Written with the installing electrician in mind, THE GUIDE TO PHOTOVOLTAIC SYSTEM INSTALLATION provides you with a simple, straightforward approach to understanding photovoltaic system installation in both residential and light

commercial buildings. Filled with illustrations, examples, and multiple opportunities for practice, this comprehensive book includes the most up-to-date information on photovoltaic installation available on the market today. In addition, coverage of topics such as the National Electrical Code requirements for a photovoltaic system installation ensures that you will be well prepared for the North American Board of Certified Energy Practitioners' (NABCEP) entry level photovoltaic installer certification exam.

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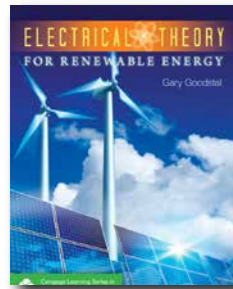
1. Introduction to Photovoltaics. 2. PV System Installation Safety. 3. Understanding Electricity Basics. 4. Solar Fundamentals. 5. PV Modules. 6. Batteries. 7. Charge Controllers. 8. Inverters. 9. PV System Wiring and the NEC. 10. Sizing PV Systems. 11. Installing PV Systems. 12. Maintaining and Troubleshooting a PV System. Appendices.

ELECTRICAL THEORY FOR RENEWABLE ENERGY

Gary Goodstal

© 2013, 352pp, Paperback, 9781133127550

ebook



Essential for anyone interested in a career in renewable energy, **ELECTRICAL THEORY FOR RENEWABLE ENERGY** presents a solid foundation of electrical theory and applications for both photovoltaic (PV) power and wind power in

one engaging text. Designed to apply to electricians as well as individuals specializing in PV and wind turbines, each chapter provides a common technical language and knowledge base for all renewable energy practitioners so that all members of the team (i.e., practitioners, designers, installers, and engineers) are able to work together effectively in the field. With multiple examples and opportunities for practice, this text covers the basic electrical theory that is required for you to understand any renewable energy source that generates electricity.

CONTENTS

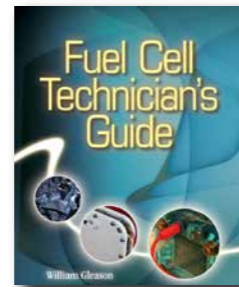
1. Atomic Theory. 2. Resistors, Capacitors and Inductors. 3. Electrical Measurement and Ohm's Law. 4. Series DC Circuit Calculations. 5. Parallel DC Circuit Calculations. 6. AC Power. 7. AC Circuit Calculations. 8. Batteries. 9. PV Cells and Arrays. 10. Wind Turbines and Electric Power Generation.

FUEL CELL TECHNICIAN'S GUIDE

William Gleason, Montana Tech, University of Montana

© 2013, 256pp, Paperback, 9781111318208

ebook



THE FUEL CELL TECHNICIAN'S GUIDE explains fuel cells and systems without requiring advanced knowledge in science or engineering for the installation, implementation, hand troubleshooting, and repair of fuel cells and systems.

This book begins with the history of fuel cells and goes on to discuss various kinds of fuel cells, system balance-of-plant issues, safety, and codes and standards that you would encounter on a real job site. Varying fuel cells are used as primary examples throughout the text, providing several different views of how fuel cells work, where they work best, and why these concepts are important.

CONTENTS

1. History of Fuel Cells. 2. What is a Fuel Cell? 3. Fuel Cell and Hydrogen Safety. 4. Types of Fuel Cells, Chemical Reactions, Classifications and Characteristics & Applications. 5. Fuel Cell Basic System Components. 6. Fuel Cell Sub-Systems. 7. Fuel Cell Systems. 8. Stationary Fuel Cell Applications. 9. Transportation and Material Handling Fuel Cells. 10. Fuel Cell Systems Process and Instrumentation P&I Diagrams. 11. Fuel Cell Systems Power and Control Schematics. 12. Distributed Generation. 13. Combined Heat and Power CHP. 14. Overall Design, Installation, Maintenance and Troubleshooting & Repair.

GREEN BUILDING

Principles and Practices in Residential Construction

Abe Kruger; Carl Seville

© 2013, 608pp, Hardback, 9781111135959

ebook



GREEN BUILDING: PRINCIPLES AND PRACTICES IN RESIDENTIAL CONSTRUCTION provides a current, comprehensive guide to this exciting, emerging field. From core concepts to innovative applications of cutting-edge

technology and the latest industry trends, this text offers an in-depth introduction to the construction of "green" homes. Unlike many texts that adopt a product-oriented approach, this book emphasizes the crucial planning, processes, and execution methods necessary for effective, environmentally sound construction. This text demonstrates that Earth-friendly products and energy-efficient materials take planning in order to make a building truly green. This visionary text helps students and professionals develop the knowledge and skills to "think green" from start to finish, empowering and inspiring them to build truly sustainable homes.

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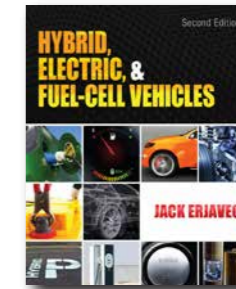
Introduction to Green Building: Principles and Practices in Residential Construction. 1. Green Building: An Overview. 2. The House as a System. 3. Planning for Green from the Start. 4. Insulation and Air Sealing. 5. Foundations. 6. Floors and Walls. 7. Roofs and Attics. 8. Fenestration. 9. Exterior Wall Finishes. 10. Outdoor Living Spaces. 11. Landscaping. 12. Interior Finishes. 13. HVAC. 14. Electrical. 15. Plumbing. 16. Renewable Energy.

HYBRID, ELECTRIC, AND FUEL-CELL VEHICLES, 2E

Jack Erjavec, Columbus State Community College (Emeritus)

© 2013, 400pp, Paperback, 9780840023957

ebook



HYBRID, ELECTRIC AND FUEL-CELL VEHICLES, Second Edition, covers the cutting-edge technology and technology that are revolutionizing today's automotive industry. Author Jack Erjavec combines in-depth industry expertise with an engaging, reader-

friendly style, providing extensive detail on new and upcoming electric vehicles, including hybrids in production today and the fuel cell vehicles of tomorrow. Expansive coverage ranges from basic theory related to vehicle construction, electricity, batteries, and motors, to the political and social impact of these high-profile vehicles. In addition to up-to-date, highly accurate technical information on vehicles available today—including service procedures and safe shop practices—the text provides an informed look into the future with material on vehicles currently under development.

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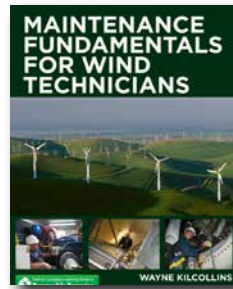
1. An Introduction to Electric Vehicles. 2. Electrical Basics. 3. Motor and Generator Basics. 4. Battery Basics. 5. The Basics of a Battery Operated Electric Vehicle. 6. HEV Basics. 7. Mild and Assist Hybrids. 8. Full Hybrids. 9. Hybrid Maintenance and Service. 10. Fuel Cell and Other Possible Vehicles.

MAINTENANCE FUNDAMENTALS FOR WIND TECHNICIANS

Wayne Kilcollins, Northern Maine Community College

© 2013, 464pp, Paperback, 9781111307745

ebook



Practical and easy to understand, MAINTENANCE FUNDAMENTALS FOR WIND TECHNICIANS provides a comprehensive introduction to the field of wind energy that is appropriate for any electrical or mechanical technician.

Through topics such as developing a preventative maintenance program, determining the performance of a wind turbine system, and monitoring improvement through system data analysis, this text teaches you the skills you need to be a successful wind energy technician. Safety-related practices, such as working at heights, tower rescue practices, and offshore projects, are emphasized to ensure that you understand the hazards associated with working in the wind industry. Study tools such as hands-on exercises, applications, troubleshooting tips, and learning objectives keyed to AWEA skills will help you learn everything you need to know to succeed in your class and successfully maintain, service, and troubleshoot turbines on wind farms.

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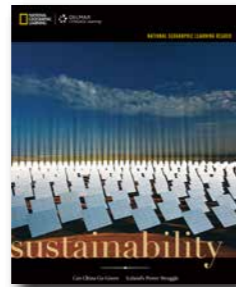
1. Introduction. 2. Tower Safety. 3. Workplace Safety. 4. Workplace Hazards. 5. Lubrication. 6. Fluid Power. 7. Bolting Practices. 8. Test Equipment. 9. Component Alignment. 10. Down Tower Area. 11. Tower. 12. Machine Head. 13. Drive Train Assembly. 14. Generator. 15. Rotor Assembly. 16. External Surfaces. 17. Developing a Preventative Maintenance Program. 18. Park Management Tools. Endnotes. Resource Materials. Index.

NATIONAL GEOGRAPHIC READER: SUSTAINABILITY (WITH PRINTED ACCESS CARD)

National Geographic Learning

© 2013, 50pp, Paperback, 9781285060613

ebook



Bring your learning to life with compelling images, media and text from National Geographic. NATIONAL GEOGRAPHIC LEARNING READER: SUSTAINABILITY w/PAC eBook will help you develop a clearer understanding of the world

around you through engaging content. This reader is designed to be used in combination with several core texts in a variety of trades fields by focusing on the importance of Green and Sustainability. Used as a supplement with two strong brands of National Geographic and Delmar Learning, this reader will bring relevancy, critical thinking skill activities, vocabulary and career information to the topics you are studying. With broad articles included in the reader, the companion website will allow you to apply topics as they show how the theories are applied in a real world setting.

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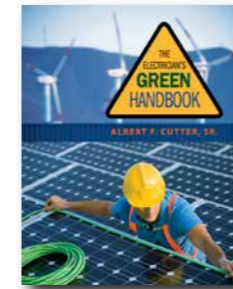
Can China Go Green. Iceland's Power Struggle. Plugging into the Sun. Can Solar Save Us. The 21st Century Grid. Future Power. The Big Idea: Get the Salt Out. High Marks for Clean Water. The Deep Dilemma. Next: Space Elevator. Environment: London's Green Giant. Up on the Roof.

THE ELECTRICIANS GREEN HANDBOOK

Albert F. Cutter, Sr.

© 2012, 288pp, Paperback, 9781111129804

ebook



THE ELECTRICIAN'S GREEN HANDBOOK is written for anyone with an interest in the inner workings of alternative energy systems. This book is written by an electrician about electrical systems for electricians, maintenance personnel and those looking

to expand their knowledge in alternative energy systems. Real world state of the art components are used in this book, complete with details and product specifications. Alternative energy systems discussed include Solar, Wind, Hydrogen and Battery Backup Systems. Unlike most other books written on the subject, THE ELECTRICIAN'S GREEN HANDBOOK, provides you with an understanding of these systems from an installation and maintenance point of view. Discussed in detail are the circuit configurations of stand-alone inverters, string inverters, central inverters, micro-inverters and rectifiers, which are the key components of any alternative energy installation used today. The National Electrical Code (NEC) 2011 is used throughout the text and systems are taken apart and the NEC 2011 is examined for each part of the systems. Monitoring the output of alternative energy systems is not only required for maximum efficiency, it is essential. This book covers the components, systems and topologies for monitoring the system functions and performance and is a must for the journeyman electrician and electrical students of all levels.

CONTENTS

1. Introduction. 2. Inverters / Rectifiers. 3. Photovoltaic. 4. Wind Power. 5. Battery Systems. 6. Hydrogen Fuel Cell. Appendix.

WIND TURBINE TECHNOLOGY

Ahmad Hemami, Iowa Lakes Community College

© 2012, 416pp, Paperback, 9781435486461

ebook



WIND TURBINE TECHNOLOGY, is a comprehensive and well illustrated book on the theory and operations of wind turbines that generate electricity for power companies. This text is written as an introduction to wind energy technology. It

prepares readers for a career as wind energy technicians who are responsible for maintaining, servicing and troubleshooting turbines on wind farms. This is an inclusive text that covers the main subjects associated with wind turbines. Dr. Hemami uses a practical, step-by-step manner with many examples and applications to help you to have a better understanding of the material. The book is divided into 17 progressive chapters. The book is divided into progressive sections, starting with fundamental subjects such as energy in the wind and effect of wind on a blade and continues onto more advanced materials such as grid connection and economics of wind turbines.

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1. Introduction. 2. Energy in the Wind. 3. Fundamentals. 4. Wind Turbine Basic Types, Analysis and Characteristics. 5. Propeller Wind Turbine. 6. Electricity and Electric generation. 7. Propeller-Type Wind Turbine Characteristics. 8. Grid Connection. 9. Wind turbine mechanical systems. 10. Control of Wind Turbines (Part 1: Mechanical Side). 11. Control of Wind Turbines (Part 2: Generator Side). 12. Ancillary Electric Devices. 13. Wind Turbine Mechanical Design Matters. 14. Economics of Wind Energy. 15. Environmental Concerns. 16. Safety and Other Issues. 17. Working on Wind Turbines and Operator's Safety. Appendices. Index.

VETERINARY TECHNOLOGY

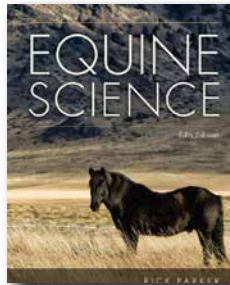
VETERINARY TECHNOLOGY

EQUINE SCIENCE, 5E

R.O. (Rick) Parker, Ph.D., College of Southern Idaho

© 2019, 640pp, Hardback, 9781305949720

CENGAGE | MINDTAP **ebook**



This engaging, informative text provides a thorough introduction to equine care and management. EQUINE SCIENCE, Fifth Edition, features a full-color layout, numerous photos, and vivid illustrations that help bring chapter material to life, as well as a logical, easy-to-understand sequence of topics. Following

an introduction to the equine industry, you'll learn about horses' unique anatomy and needs; how to care for, train, and manage horses; and key business aspects of the industry. This all-new edition also clearly connects text content to National AFNR (Agriculture, Food, and Natural Resources) Standards, key math and science concepts, and current references, helping prepare you for success in the classroom and beyond.

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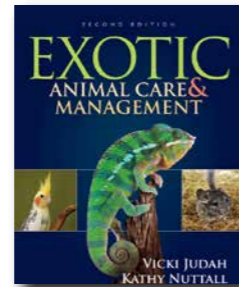
1. History and Development of the Horse. 2. Status and Future of the Horse Industry. 3. Breeds, Types, and Classes of Horses. 4. Cells, Tissues, and Organs. 5. Functional Anatomy. 6. Biomechanics of Movement. 7. Unsoundness. 8. Selecting and Judging Horses. 9. Determining Age, Height, and Weight of Horses. 10. Genetics. 11. Reproduction and Breeding. 12. Digestion and Nutrition. 13. Feeds and Feeding Horses. 14. Health Management. 15. Parasite Control. 16. Common Management Practices. 17. Shoeing and Hoof Care. 18. Buildings and Equipment. 19. Horse Behavior and Training. 20. Equitation. 21. Business Aspects. 22. Career Opportunities. Appendices. Glossary.

EXOTIC ANIMAL CARE AND MANAGEMENT, 2E

Vicki Judah; Kathy Nuttall, Jordan Applied Technology Center

© 2017, 384pp, Paperback, 9781285425085

ebook



Focusing exclusively on the care of exotic species as pets, EXOTIC ANIMAL CARE AND MANAGEMENT, 2ND EDITION delves into the unique behaviors, diet, housing considerations, handling and restraint methods, medical concerns

and clinical procedures related to the proper management of these animals. Reader-friendly and concise, each chapter covers a specific exotic animal commonly found in veterinary practice, including small mammals, birds, reptiles, amphibians, invertebrates, alpacas and llamas, miniature pigs and backyard chickens. Also included is an overview of specific concerns and zoonotic diseases associated with exotic animals so that you are fully prepared to contribute to their care and treatment.

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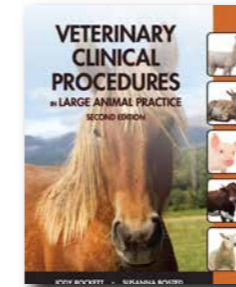
UNIT I: 1. Introduction to Exotic Animals. 2. Zoonotic Disease. UNIT II: 3. Introduction to Small Mammals. 4. Ferrets. 5. Rabbits. 6. Guinea Pigs. 7. Chinchillas. 8. Hedgehogs. 9. Degus. 10. Hamsters and Gerbils. 11. Rats and Mice. 12. Short-Tailed Opposums. 13. Sugar Gliders. UNIT III: 14. Avian. UNIT IV: 15. Reptiles. UNIT V: 16. Amphibians. UNIT VI: 17. Scorpions. 18. Tarantulas. 19. Hermit Crabs. UNIT VII: 20. Alpacas and Llamas. UNIT VIII: 21. Miniature Pigs. Glossary. Appendix. Index.

VETERINARY CLINICAL PROCEDURES IN LARGE ANIMAL PRACTICES, 2E

Jody Rockett, DVM, College of Southern Idaho; Susanna Bosted, DVM, College of Southern Idaho

© 2016, 672pp, Hardback, 9781285424637

ebook



Delivering clear and concise step-by-step instructions, VETERINARY CLINICAL PROCEDURES IN LARGE ANIMAL PRACTICE, 2e thoroughly addresses the most common clinical procedures performed on horses, cattle, sheep, llamas, goats, and pigs in

large animal veterinary practice. Every procedure includes a stated purpose, a review of potential complications, a checklist of the equipment required, and step-by-step descriptions with corresponding rationale that not only explains what needs to be done, but why each action will lead toward a successful outcome for the patient. With the new inclusion of clinical procedures for sheep and the addition of current information related to each large animal considered, this edition seeks to fully prepare you with the skills you need in the field.

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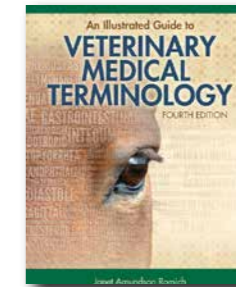
SECTION I – CARE AND RESTRAINT TECHNIQUES. 1. Ropes and Knots. 2. Restraint Tools and Techniques. 3. Grooming and Stall Maintenance. SECTION II – PHYSICAL EXAMINATION. 4. Physical Examination. SECTION III – SAMPLE COLLECTION AND CLINICAL PROCEDURES. 5. Sample Collection. 6. Clinical Procedures. 7. Neonatal Clinical Procedures. SECTION IV – SURGICAL, RADIOGRAPHIC AND ANESTHETIC PREPARATION. 8. Surgical Preparations. 9. Selected Lower Limb Radiographic Procedures. 10. Anesthetic.

AN ILLUSTRATED GUIDE TO VETERINARY MEDICAL TERMINOLOGY, 4E

Janet Amundson Romich, Madison Area Technical College

© 2015, 560pp, Paperback, 9781133125761

CENGAGE | MINDTAP **ebook**



Providing the ultimate terminology reference for veterinary assistants and technicians, AN ILLUSTRATED GUIDE TO VETERINARY MEDICAL TERMINOLOGY, 4e provides an engaging approach to learning medical terms and understanding basic principles

of veterinary medicine. This user-friendly book delivers a unique pedagogical presentation that makes it a comprehensive learning resource. Its systematic approach enables you to understand basic medical concepts and apply critical thinking skills in determining the meaning of new medical terms. Focusing on how medical terms are formed, analyzed, and defined, the book discusses anatomical landmarks, the positioning of animals, and the relationships between body parts. It also introduces terms used in the animal industry. Case studies illustrate how medical terminology is experienced in real-world practice and an audio wordlist enables you to hear the terms you are learning.

CONTENTS

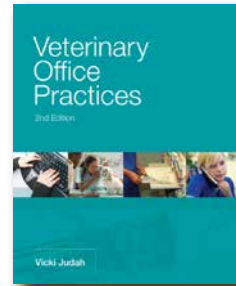
1. Ready, Set, Go. 2. Where, Why, What. 3. Meat and Bones. 4. Head and Toe (And All Parts in Between). 5. What is in a Name? 6. Gut Instincts. 7. Null and Void. 8. Have a Heart. 9. A Breath of Fresh Air. 10. Skin Deep. 11. The Great Communicator. 12. 1 + 1 = 3 (or More). 13. Nerves of Steel. 14. Seeing and Hearing. 15. Feed and Protect Me. 16. Testing, Testing. 17. Drugs and Dissection. 18. Like Cats and Dogs. 19. Horse Sense. 20. Make Room for Ruminants. 21. Hog Haven. 22. Birds of a Feather. 23. All the Rest. Appendices. Index.

VETERINARY OFFICE PRACTICES, 2E

Vicki Judah

© 2012, 256pp, Paperback, 9781111139001

ebook



VETERINARY OFFICE PRACTICE, 2ND Edition provides an inside look at the exciting roles and responsibilities of veterinary assistants in animal hospitals or private veterinary practice, along with detailed instructions on scheduling, client relations,

charting, case management software, billing, and everything you need to work successfully within a veterinary practice. In addition to clear learning objectives, helpful charts and graphics, and reader-friendly concepts, VETERINARY OFFICE PRACTICE, 2ND Edition's includes case studies and review questions that allow you to apply chapter concepts and check your understanding.

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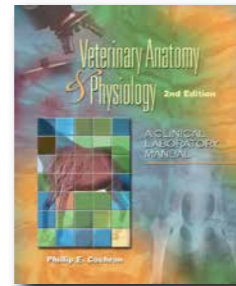
1. Introduction to Veterinary Practice.
2. Care and Maintenance of the Veterinary Practice Facility.
3. Front Office and Receptionist Duties
4. Computers.
5. Communication Skills.
6. Interacting with Clients.
7. Stress.
8. Ethics.
9. Financial Matters.

LABORATORY MANUAL FOR COMPARATIVE VETERINARY ANATOMY & PHYSIOLOGY, 2E

Phillip E. Cochran, M.S., D.V.M.

© 2011, 400pp, Spiral, 9781435464339

ebook



Veterinary Anatomy & Physiology: A Clinical Laboratory Manual, 2E is designed as a lab manual for veterinary technology and pre-veterinary medicine students who possess a basic knowledge of biology. It is the only comparative veterinary anatomy and

physiology manual that covers cat dissection, sheep heart, brain and eye, and the pig's kidney. Veterinary Anatomy & Physiology: A Clinical Laboratory Manual, 2E also covers the muscular, digestive, respiratory, cardiovascular, urinary, reproductive, endocrine and nervous systems, as well as the skeletal anatomy of many species and the histology of tissues. This book's introduction to laboratory equipment and techniques will prepare you for lab work. Each chapter includes a physiology experiment to help illustrate for you some of the principles of physiology covered in the lecture portions of the course instruction.

CONTENTS

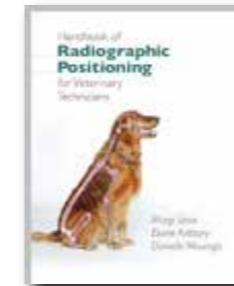
1. Terminology of Anatomy.
2. The Use of the Microscope.
3. Cellular Anatomy & Morphology.
4. General Principles of Histology.
5. Microscopic Anatomy of Tissues.
6. The Integumentary System.
7. The Skeletal System.
8. The Muscular System.
9. The Digestive System.
10. The Respiratory System.
11. The Cardiovascular System.
12. The Urinary System.
13. The Endocrine System.
14. The Genital System.
15. The Nervous System.
16. Organs of Special Sense.
17. Necropsy.

HANDBOOK OF RADIOGRAPHIC POSITIONING FOR VETERINARY TECHNICIANS

Margi Sirois; Elaine Anthony

© 2010, 224pp, Spiral, 9781435426030

ebook



The Handbook of Radiographic Positioning for Veterinary Technicians is specifically designed for use as an aid in learning radiographic positioning techniques and as a practical guide for everyday use in the small animal clinic. This concise

handbook presents a systematic approach to the positioning of canine, feline, and exotic animal patients for routine and special radiographic procedures. The primary focus is on providing visual aids of animals in position for radiographic procedures. The resulting radiograph produced is included for each radiographic position. A diagram of anatomical landmarks used in determining correct positioning is also included.

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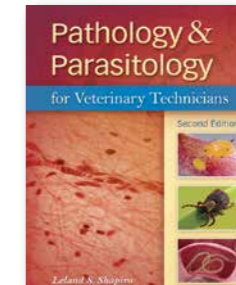
- Chapter 1: General Principles of Small Animal Radiographic Positioning. Chapter 2: Thoracic Radiographs. Chapter 3: Abdominal Radiographs. Chapter 4: Pelvic Radiographs. Chapter 5: Forelimb Radiographs. Chapter 6: Hindlimb Radiographs. Chapter 7: Skull Radiographs. Chapter 8: Dental Radiographs. Chapter 9: Spinal Radiographs. Chapter 10: Radiography of Avian and Exotic Animals.

PATHOLOGY & PARASITOLOGY FOR VETERINARY TECHNICIANS, 2E

Dr. Leland S. Shapiro, L.A. Pierce College

© 2010, 304pp, Paperback, 9781435438552

ebook



PATHOLOGY AND PARASITOLOGY FOR VETERINARY TECHNICIANS, 2E is the publication professionals and future professionals turn to for detailed information on pathology and parasitology in veterinary medicine. It

features clear-cut descriptions, case studies, and methodologies experienced in the practical setting. Veterinary professionals and those in the animal, equine, dairy, and poultry fields will benefit from explanations about technical procedures, parasite life cycles, zoonotic potential, diagnosis, and treatment. A review of current literature provides valuable background, and the accompanying CD-ROM Image Library features extensive color images of parasites and various pathologies.

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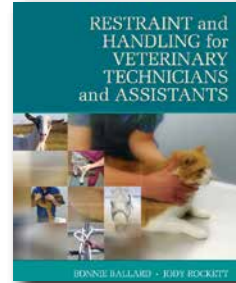
- Part I - Pathology Chapter 1: Introduction to Pathology. Chapter 2: Cell Injury and Cell Death. Chapter 3: Inflammation and Healing. Chapter 4: Review of the Circulatory System. Chapter 5: Neoplasia: An Introduction to Tumors. Chapter 6: Immunological Diseases. Chapter 7: Mechanisms of Infections and Causes of Infectious Disease. Chapter 8: Genetic Disorders. Chapter 9: Environmental and Nutritional Diseases. Chapter 10: Zoonosis and Safety on the Job. Part II - Parasitology Chapter 11: The Variety of parasites. Chapter 12: Ectoparasites of large animals. Chapter 13: Ectoparasites of small animals. Chapter 14: Endoparasites of Large Animals. Chapter 15: Endoparasites of small animals. Appendix: Specific Diseases of Selected Species. Specific How to do or Prepare Examples. Glossary.

RESTRAINT & HANDLING FOR VETERINARY TECHNICIANS & ASSISTANTS

Bonnie Ballard, DVM; Jody Rockett, DVM, College of Southern Idaho

© 2010, 144pp, Paperback, 9781435453586

ebook



Restraint and Handling for Veterinary Technicians and Assistants provides the knowledge required to restrain animals in a way that is safe for both the patient and the restrainer. Written in a “how to” format Restraint and Handling for Veterinary Technicians and

Assistants details information required for proper restraint for both small and large animals, as well as exotics. To aid the reader, the text features a glossary of terms and practice questions at the end of each chapter, and illustrates the most common restraint techniques seen in veterinary practice.

CONTENTS

Unit 1: SMALL ANIMAL RESTRAINT. Chapter 1. Principles of Restraint in Veterinary Practice. Principles of Restraint. Animals in a Veterinary Facility. Complications of Restraint. Chapter 2. Restraint Tools and Techniques for Small Animals. The Use of Restraint Tools in Small Animal Practice. Noose Leashes. Rabies Pole. Blankets and Towels. Leather Gloves. Cat Bag. Dog Muzzles. Cat Muzzles. Cat Burrito Restraint. Chapter 3. Restraint of Dogs. Restraint of the Dog. Guidelines for Restraint of the Dog. Restraint of the Dog in the Standing Position. Restraint of the Dog in the Sitting Position. Restraint of the Dog in Sternal Recumbency. Restraint of a Dog's Head for Procedures Performed by Someone Else. Single Person Restraint of a Dog's Head When Performing a Procedure to the Head. Restraint of a Dog in Lateral Recumbency. Restraint of the Dog for Cephalic Venipuncture. Restraint for Venipuncture of the Lateral Saphenous vein. Restraint for Jugular Venipuncture. Chapter 4. Restraint of Cats.

Restraint of the Cat. Restraint of the Cat Using the One-Hand Hold. Restraint of the Cat in Sternal Recumbency. Restraint of the Cat in the Standing Position. Procedure for Restraint of a Cat's Head. “Cat Stretch” Restraint (Restraint of the Cat in Lateral Recumbency). Restraint of the Cat for Medial Saphenous Vein Venipuncture. Restraint of the Cat for Cephalic Venipuncture. Restraint of the Cat for Jugular Venipuncture. Removing a Cat from a Cage. Placing a Cat in a Cage. Chapter 5. Restraint of Exotic Pets. Restraint of Exotics. Restraint of the Ferret. Restraint of the Rabbit. Restraint of the Pet Bird. Restraint of the Guinea Pig. Unit 2: LARGE ANIMAL RESTRAINT. Chapter 6. Ropes and Knots. Ropes. Finishing the End of a Rope. Quick-Release Knot. Bowline. Tomfool Knot. Double Half Hitch Knot. Tail Tie. Braiding an Eye Splice. Rope Halters. Chapter 7. Restraint of the Horse. Restraint of the Horse. Guidelines for Restraint of the Horse. Horse Behavior. Rules of Tying. Stock. Haltering and Leading. Applying Chains. Twitches. Loading Horses in Trailers. Special Handling Scenarios. Chapter 8. Restraint of Cattle. Restraint of Cattle. Guidelines for Restraint of Cattle. Processing Facilities. Operating Chutes. Haltering. Tailing-Up Cattle. Casting Cattle. Flanking. Securing Cattle Feet for Examination. Hot Shot. Nose Tongs. Nose Rings. Chapter 9. Restraint of the Goat. Restraint of the Goat. Guidelines for Restraint of the Goat. Collaring and Leading Goats. Stanchion. Chapter 10. Restraint of the Pig. Restraint of Pigs. Guidelines for Restraint of the Pig. Pig Boards. Castration Restraint. Snout Snare. Chapter 11. Restraint of the Llama. Restraint of the Llama. Guidelines for Restraint of the Llama. Haltering and Leading. Stock. Glossary. Index.

VETERINARY TECHNICIAN'S POCKET PARTNER

A Quick Access Reference Guide

Marisa Bauer

© 2010, 256pp, Spiral, 9781428357822

ebook



THE VETERINARY TECHNICIAN'S POCKET PARTNER is a comprehensive, pocket-sized reference guide for the small animal practitioner. The easy to use format provides access to practical information needed to excel in the workplace. THE

VETERINARY TECHNICIAN'S POCKET PARTNER reviews common lab and nursing procedures, animal nutrition, and provides on-the-job terminology and abbreviations at your fingertips. The Pocket Partner also covers essential clinical topics relating to emergency care, surgery and pharmaceuticals, as well as additional information on standard office procedures. Instead of spending valuable time researching information, veterinary technicians can use the color-coded tabs, helpful websites, and charts like the canine and feline zoonotic table, to quickly access the information they need. The book's wipe and wash pages, and notes pages for personalized information ensure usability and durability.

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Chapter 1. Anatomy. Chapter 2. Anesthesia. Chapter 3. Cytology and Endocrine Function Testing. Chapter 4. Dentistry. Chapter 5. Emergencies. Chapter 6. Physical Examination. Chapter 7. Hematology. Chapter 8. Imaging. Chapter 9. Nursing Care. Chapter 10. Nutrition. Chapter 11. Medical Records and Office Procedures. Chapter 12. Parasitology. Chapter 13. Pharmaceuticals. Chapter 14. Pocket Pets. Chapter 15. Reproduction. Chapter 16. Surgery. Chapter 17. Urinalysis. Chapter 18. Vaccines and Disease. Chapter 19. Zoonosis.

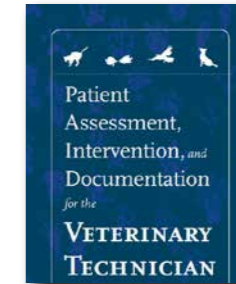
PATIENT ASSESSMENT, INTERVENTION AND DOCUMENTATION FOR THE VETERINARY TECHNICIAN

A Guide to Developing Care Plans and SOAP's

Jody Rockett, DVM, College of Southern Idaho; Cynthia Lattanzio; Katie Anderson

© 2009, 480pp, Spiral, 9781418067496

ebook



Patient Assessment, Intervention and Documentation for the Veterinary Technician addresses the methodology used to apply substantive information to real world problems in the education of veterinary technicians. Nursing students in human

medicine have long benefited from instruction in the Nursing Process, which is a method for using critical thinking skills to apply theoretical knowledge to actual cases. This text develops a similar methodology for veterinary technicians, called the “Technician Practice Model”. This guide identifies and describes the various steps in the Technician Practice Model and provides both instruction and examples on documenting the results of that process. Particular emphasis is given to developing SOAP notes and Medication Administration/Order Records (MAOR).

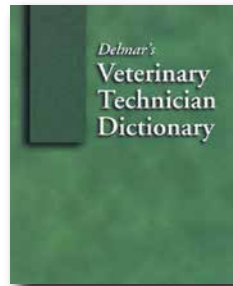
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Chapter 1: Veterinary Technician Practice Model and Documentation Chapter 2: Generating the Database Chapter 3: Technician Evaluations with Suggested Interventions Chapter 4: Medical Conditions and Associated Technician Evaluations Chapter 5: Surgical Procedures and Associated Technician Evaluations Chapter 6: Therapeutic Procedures and Associated Technician Evaluations Chapter 7: Sample Cases with Documentation Appendix Glossary Index

DELMAR'S VETERINARY TECHNICIAN DICTIONARY

Dr. Ray V. Herren, University of Georgia, Athens (Emeritus);
Janet Amundson Romich, Madison Area Technical College;
Thomson Delmar Learning

© 2000, 360pp, Paperback, 9780766814219



Delmar's Veterinary Technology Pocket Dictionary is essential for veterinary technology students.

CONTENTS

Forward. Guide to Dictionary. A-Z Terms and Definitions. Appendices: A- Weight Conversion Table. B- Commonly Used Abbreviations. C- Reference Laboratory Values for Dogs and Cats. D- Reference Laboratory Values for Horses and Large Animals. E- Annotated Internet Resources.

WELDING

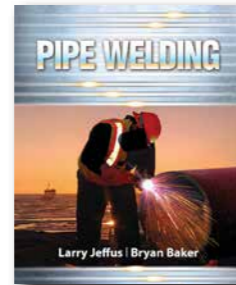
ARC WELDING

PIPE WELDING

Larry Jeffus, Eastfield College (Emeritus); Bryan Baker

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ebook



PIPE WELDING, 1E is a comprehensive guide to pipe welding that will help you take your career potential to the next level. In the surging pipe welding job market, you need to not only know basic welding techniques, such as pipe layout and assembly, you

also need to master welding techniques like SMAW, GMAW, FCAW, and GTAW processes. This textbook is the practical guide that can help you become a safe, effective, and marketable pipe welder.

CONTENTS

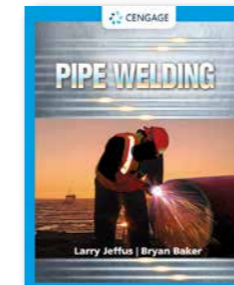
1. Introduction to Pipe Welding. 2. Welding Safety. 3. Shop Math. 4. Blueprint Reading and Welding Symbols. 5. Thermal Cutting Processes. 6. Pipe Joint Design and Preparation. 7. Pipe Fit-Up and Alignment. 8. Shielded Metal Arc Welding of Pipe. 9. Gas Metal Arc Welding of Pipe. 10. Flux Cored Arc Welding of Pipe. 11. Gas Tungsten Arc Welding of Pipe. 12. Pipe Welding with Multiple Processes. 13. Machine and Automatic Pipe Welding. 14. Filler Metals. 15. Welding Metallurgy. 16. Weld Discontinuity and Defects. 17. Pipe Weld Repairs. 18. Testing and Inspecting Welds. 19. Pipe Welding Certification – Welding Procedures. 20. Pipe Threads.

PIPE WELDING

Larry Jeffus, Eastfield College (Emeritus); Bryan Baker

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ebook



PIPE WELDING, 1E is a comprehensive guide to pipe welding that will help you take your career potential to the next level. In the surging pipe welding job market, you need to not only know basic welding techniques, such as pipe layout and assembly, you

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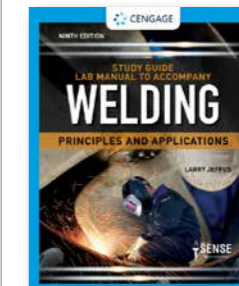
PRINCIPLES/COMPREHENSIVE

NEW EDITION

STUDY GUIDE WITH LAB MANUAL FOR JEFFUS' WELDING: PRINCIPLES AND APPLICATIONS, 9E

Larry Jeffus, Eastfield College (Emeritus)

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The Study Guide helps reinforce your understanding of concepts presented in the text. Each chapter starts with a review of the important topics discussed in the chapter. You can then test your knowledge by answering additional questions and completing

lab exercises (as appropriate) to reinforce the primary objectives of the lesson, and view artwork and safety precautions.

NEW EDITION

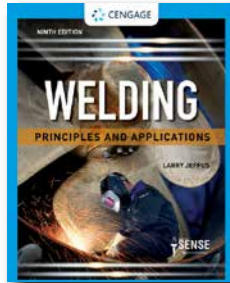
WELDING, 9E

Principles and Applications

Larry Jeffus, Eastfield College (Emeritus)

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CENGAGE | MINDTAP **ebook**



This proven guide provides the knowledge and skills you need to complete AWS SENSE Level I and Level II programs, create Workmanship Qualification Specimens, and earn professional certification. Advancing rapidly from basic concepts and

processes to today's most complex, cutting-edge welding technologies and practices, this comprehensive text features valuable information on topics such as welding metallurgy, metal fabrication, weld testing and inspection, joint design, job costing, and environmental and conservation tips. The author opens each section by introducing you to the materials, equipment, setup procedures, and critical safety information you need to execute a specific process successfully, while subsequent chapters focus on individual welding tasks leading to SENSE certification. In addition to hundreds of new photos showcasing current welding tools and techniques, the Ninth Edition includes new and updated information on GTAW cup walking, induction welding machine operations, innovations in PAC equipment, and other industry advances you are likely to encounter as you begin your career as a welding professional.

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1. Introduction to Welding.
2. Safety in Welding.
3. Shielded Metal Arc Equipment, Setup, and Operation.
4. Shielded Metal Arc Welding of Plate.
5. Shielded Metal Arc Welding of Pipe.
6. Shielded Metal Arc Welding AWS SENSE Certification.
7. Flame Cutting Equipment, Setup, and Operation.
8. Plasma Arc Cutting Equipment, Setup, and

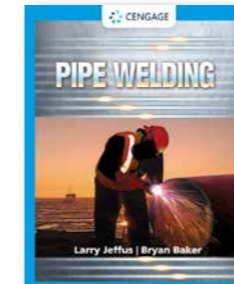
9. Related Cutting Processes.
10. Gas Metal Arc Welding Equipment, Setup, and Operation.
11. Gas Metal Arc Welding.
12. Flux Cored Arc Welding Equipment, Setup, and Operation.
13. Flux Cored Arc Welding.
14. Gas Metal Arc and Flux Cored Arc Welding of Pipe.
15. Gas Metal Arc and Flux Cored Arc Welding AWS SENSE Certification.
16. Gas Tungsten Arc Welding Equipment, Setup, and Operation.
17. Gas Tungsten Arc Welding of Plate.
18. Gas Tungsten Arc Welding of Pipe.
19. Gas Tungsten Arc Welding Plate and Pipe AWS SENSE Certification.
20. Shop Math and Weld Cost.
21. Reading Technical Drawings.
22. Welding Joint Design and Welding Symbols.
23. Fabricating Techniques and Practices.
24. Welding Codes and Standards.
25. Testing and Inspection.
26. Welding Metallurgy.
27. Weldability of Metals.
28. Filler Metal Selection.
29. Welding Automation and Robotics.
30. Other Welding Processes.
31. Oxyfuel Welding Equipment, Setup, and Operation.
32. Oxyacetylene Welding and Brazing, Braze Welding, and Soldering.

PIPE WELDING

Larry Jeffus, Eastfield College (Emeritus); Bryan Baker

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ebook



PIPE WELDING, 1E is a comprehensive guide to pipe welding that will help you take your career potential to the next level. In the surging pipe welding job market, you need to not only know basic welding techniques, such as pipe layout and assembly, you

also need to master welding techniques like SMAW, GMAW, FCAW, and GTAW processes. This textbook is the practical guide that can help you become a safe, effective, and marketable pipe welder.

CONTENTS

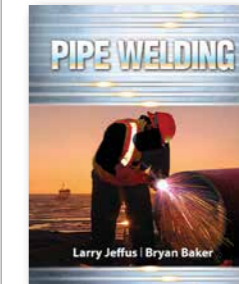
1. Introduction to Pipe Welding.
2. Welding Safety.
3. Shop Math.
4. Blueprint Reading and Welding Symbols.
5. Thermal Cutting Processes.
6. Pipe Joint Design and Preparation.
7. Pipe Fit-Up and Alignment.
8. Shielded Metal Arc Welding of Pipe.
9. Gas Metal Arc Welding of Pipe.
10. Flux Cored Arc Welding of Pipe.
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12. Pipe Welding with Multiple Processes.
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19. Pipe Welding Certification – Welding Procedures.
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PIPE WELDING

Larry Jeffus, Eastfield College (Emeritus); Bryan Baker

© 2017, 396pp, Hardback, 9781133691846

ebook



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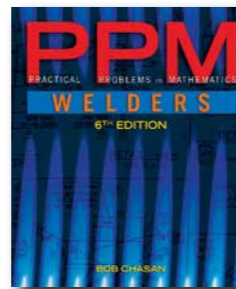
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PRACTICAL PROBLEMS IN MATHEMATICS FOR WELDERS, 6E

Robert Chasan, Gateway Community College

© 2012, 240pp, Paperback, 9781111313593

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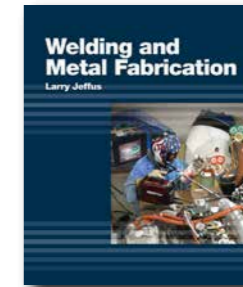
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WELDING AND METAL FABRICATION

Larry Jeffus, Eastfield College (Emeritus)

© 2012, 800pp, Hardback, 9781418013745

ebook



WELDING AND METAL FABRICATION employs a unique hands-on, project-based learning strategy to teach welding skills effectively and keep you motivated. This groundbreaking new text connects each welding technique to a useful and

creative take-home project, making exercises both practical and personal—and avoiding the tedium of traditional, repetitive welding practices. To further enhance the learning process, every welding project includes a set of prints with specifications, like those used in production fabrication shops. This full-featured approach to skill-building reflects the reality of professional welding, where following prints and instructions precisely and laying out, cutting out, and assembling weldment accurately are just as essential as high-quality welding. The included projects are small to conserve materials during the learning process, but detailed instructions and abundant photos and illustrations guide you through a wide range of fabrication skills. Key steps and techniques within the small projects are also linked to larger projects presented at the end of each chapter, enabling you to apply what you have learned by fabricating and welding something more substantial. This thorough, reader-friendly text also covers relevant academics, such as shop math and measurement, and prepares you for real-world success by having you document your time and materials for each project and prepare a detailed invoice.

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WELDING AND METAL FABRICATION, INTERNATIONAL EDITION

Larry Jeffus, Eastfield College (Emeritus)

© 2012, 800pp, Paperback, 9781111308056

ebook



WELDING AND METAL FABRICATION, International Edition employs a unique hands-on, project-based learning strategy to teach welding skills effectively and keep you motivated. This groundbreaking new text connects each welding

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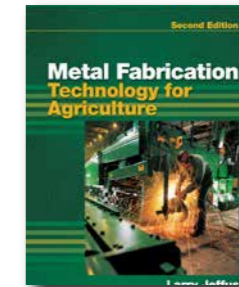
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METAL FABRICATION TECHNOLOGY FOR AGRICULTURE, 2E

Larry Jeffus, Eastfield College (Emeritus)

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ebook



METAL FABRICATION TECHNOLOGY FOR AGRICULTURE, 2E provides students with an easy-to-understand, safety-conscious introduction to agricultural welding processes and techniques. Each section of this full-color book begins by

introducing students to equipment and materials used in agricultural welding and includes complete setup instructions. The subsequent chapters in each section allow students to learn individual welding techniques in various applications and positions. METAL FABRICATION TECHNOLOGY FOR AGRICULTURE, 2E provides extensive coverage of brazing and specialized nonmetallic fabrication, designed to lead students step-by-step in developing the skills necessary for welding all types of agricultural machinery. Each chapter includes close up shots of actual welds and learning aids that have been proven to be effective, making this how-to and reference manual a key resource for students participating in agriculture education programs throughout the country.

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1. Introduction to Agricultural Welding and Fabrication. 2. Safety in Welding and Fabrication. 3. Oxyfuel Welding and Cutting Equipment, Setup, and Operation. 4. Oxyacetylene Welding. 5. Soldering and Brazing. 6. Oxyacetylene Cutting. 7. Plasma Arc Cutting. 8. Shielded Metal Arc Equipment, Setup, and Operations. 9. Shielded Metal Arc Welding of Plate. 10. Shielded Metal Arc Welding of Pipe. 11. Gas Metal Arc Welding Equipment, Setup, and Operation. 12. Gas Metal Arc Welding. 13. Flux Cored Arc Welding Equipment, Setup, and Operation. 14. Flux Cored Arc Welding. 15.

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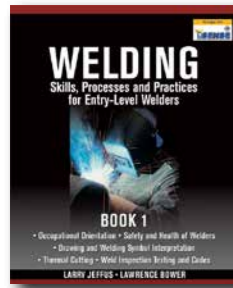
WELDING SKILLS, PROCESSES AND PRACTICES FOR ENTRY-LEVEL WELDERS

Book 1

Larry Jeffus, Eastfield College (Emeritus); Lawrence Bower, Blackhawk Technical College,

© 2010, 331pp, Paperback, 9781435427884

ebook



Welding: Skills, Processes, and Practices for Entry-Level Welders is an exciting new series that has been designed specifically to support the American Welding Society's (AWS) SENSE EG2.0 training guidelines. Offered in three volumes, these books are carefully crafted learning tools

consisting of theory-based texts that are accompanied by companion lab manuals, and extensive instructor support materials. With a logical organization that closely follows the modular structure of the AWS guidelines, the series will guide readers through the process of acquiring and practicing welding knowledge and skills. For schools already in the SENSE program, or for those planning to join, Welding: Skills, Processes, and Practices for Entry-Level Welders offers a turnkey solution of high quality teaching and learning aids.

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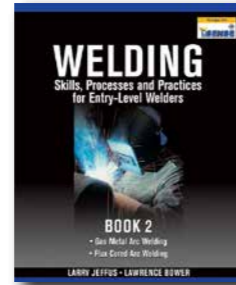
WELDING SKILLS, PROCESSES AND PRACTICES FOR ENTRY-LEVEL WELDERS

Book 2

Larry Jeffus, Eastfield College (Emeritus); Lawrence Bower, Blackhawk Technical College,

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ebook



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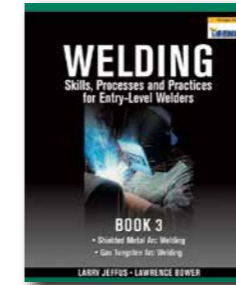
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Book 3

Larry Jeffus, Eastfield College (Emeritus); Lawrence Bower, Blackhawk Technical College,

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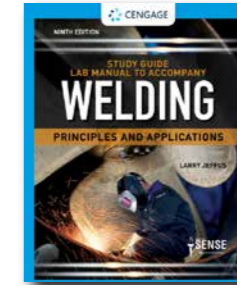
WELDING

NEW EDITION

STUDY GUIDE WITH LAB MANUAL FOR JEFFUS' WELDING: PRINCIPLES AND APPLICATIONS, 9E

Larry Jeffus, Eastfield College (Emeritus)

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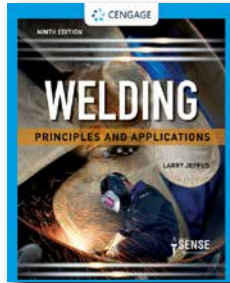
WELDING, 9E

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Larry Jeffus, Eastfield College (Emeritus)

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This proven guide provides the knowledge and skills you need to complete AWS SENSE Level I and Level II programs, create Workmanship Qualification Specimens, and earn professional certification. Advancing rapidly from basic concepts and

processes to today's most complex, cutting-edge welding technologies and practices, this comprehensive text features valuable information on topics such as welding metallurgy, metal fabrication, weld testing and inspection, joint design, job costing, and environmental and conservation tips. The author opens each section by introducing you to the materials, equipment, setup procedures, and critical safety information you need to execute a specific process successfully, while subsequent chapters focus on individual welding tasks leading to SENSE certification. In addition to hundreds of new photos showcasing current welding tools and techniques, the Ninth Edition includes new and updated information on GTAW cup walking, induction welding machine operations, innovations in PAC equipment, and other industry advances you are likely to encounter as you begin your career as a welding professional.

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8. Plasma Arc Cutting Equipment, Setup, and

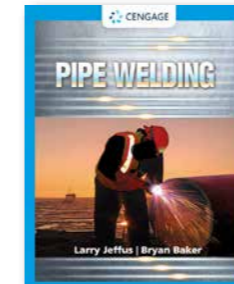
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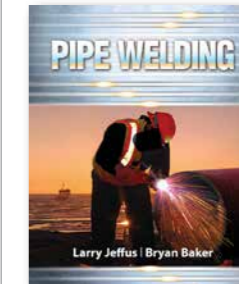
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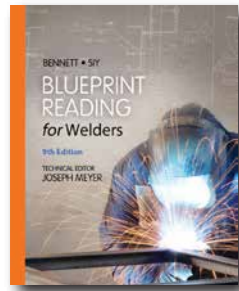
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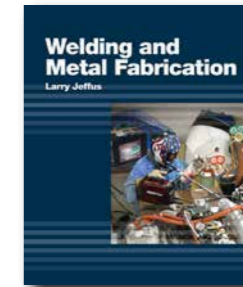
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WELDING AND METAL FABRICATION

Larry Jeffus, Eastfield College (Emeritus)

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WELDING AND METAL FABRICATION employs a unique hands-on, project-based learning strategy to teach welding skills effectively and keep you motivated. This groundbreaking new text connects each welding technique to a useful and

creative take-home project, making exercises both practical and personal—and avoiding the tedium of traditional, repetitive welding practices. To further enhance the learning process, every welding project includes a set of prints with specifications, like those used in production fabrication shops. This full-featured approach to skill-building reflects the reality of professional welding, where following prints and instructions precisely and laying out, cutting out, and assembling weldment accurately are just as essential as high-quality welding. The included projects are small to conserve materials during the learning process, but detailed instructions and abundant photos and illustrations guide you through a wide range of fabrication skills. Key steps and techniques within the small projects are also linked to larger projects presented at the end of each chapter, enabling you to apply what you have learned by fabricating and welding something more substantial. This thorough, reader-friendly text also covers relevant academics, such as shop math and measurement, and prepares you for real-world success by having you document your time and materials for each project and prepare a detailed invoice.

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WELDING AND METAL FABRICATION, INTERNATIONAL EDITION

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WELDING AND METAL FABRICATION, International Edition employs a unique hands-on, project-based learning strategy to teach welding skills effectively and keep you motivated. This groundbreaking new text connects each welding

technique to a useful and creative take-home project, making exercises both practical and personal—and avoiding the tedium of traditional, repetitive welding practices. To further enhance the learning process, every welding project includes a set of prints with specifications, like those used in production fabrication shops. This full-featured approach to skill-building reflects the reality of professional welding, where following prints and instructions precisely and laying out, cutting out, and assembling weldment accurately are just as essential as high-quality welding. The included projects are small to conserve materials during the learning process, but detailed instructions and abundant photos and illustrations guide you through a wide range of fabrication skills. Key steps and techniques within the small projects are also linked to larger projects presented at the end of each chapter, enabling you to apply what you have learned by fabricating and welding something more substantial. This thorough, reader-friendly text also covers relevant academics, such as shop math and measurement, and prepares you for real-world success by having you document your time and materials for each project and prepare a detailed invoice.

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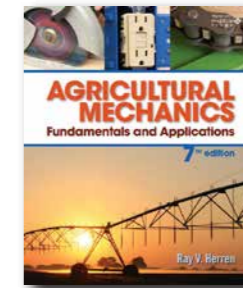
WELDING FOR AGRICULTURE

AGRICULTURAL MECHANICS: FUNDAMENTALS AND APPLICATIONS UPDATED, PRECISION EXAMS EDITION, 7E

Ray V. Herren, University of Georgia, Athens (Emeritus)

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Beyond providing a thorough introduction to the field of agricultural mechanics, the Precision Exams Edition of this trusted text aligns to Precision Exams' Agricultural Systems Technology, Level 1 exam. The text covers fundamental mechanical

and engineering theory, common tools and materials, and practical applications including shop orientation and procedures, woodworking and metalworking, tool fitting, project planning, cutting and welding, paints and paint application, power mechanics, electrical wiring, plumbing, hydraulics, concrete and masonry, and agricultural structures. Safety is also emphasized strongly throughout the text, and a dedicated unit introduces students to diverse career opportunities. The current edition also features new information on the National FFA Organization and SAEs, first aid, and engine powered equipment, as well as new activities and lab exercises.

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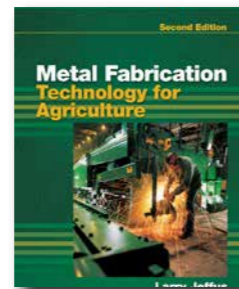
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METAL FABRICATION TECHNOLOGY FOR AGRICULTURE, 2E

Larry Jeffus, Eastfield College (Emeritus)

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ebook



METAL FABRICATION TECHNOLOGY FOR AGRICULTURE, 2E provides students with an easy-to-understand, safety-conscious introduction to agricultural welding processes and techniques. Each section of this full-color book begins by

introducing students to equipment and materials used in agricultural welding and includes complete setup instructions. The subsequent chapters in each section allow students to learn individual welding techniques in various applications and positions. METAL FABRICATION TECHNOLOGY FOR AGRICULTURE, 2E provides extensive coverage of brazing and specialized nonmetallic fabrication, designed to lead students step-by-step in developing the skills necessary for welding all types of agricultural machinery. Each chapter includes close up shots of actual welds and learning aids that have been proven to be effective, making this how-to and reference manual a key resource for students participating in agriculture education programs throughout the country.

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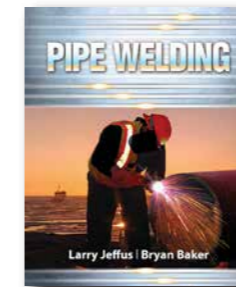
WELDING SAFETY

PIPE WELDING

Larry Jeffus, Eastfield College (Emeritus); Bryan Baker

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PIPE WELDING, 1E is a comprehensive guide to pipe welding that will help you take your career potential to the next level. In the surging pipe welding job market, you need to not only know basic welding techniques, such as pipe layout and assembly, you

also need to master welding techniques like SMAW, GMAW, FCAW, and GTAW processes. This textbook is the practical guide that can help you become a safe, effective, and marketable pipe welder.

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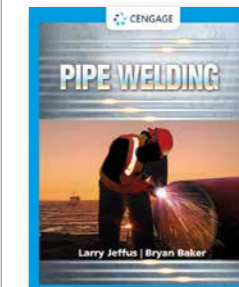
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PIPE WELDING

Larry Jeffus, Eastfield College (Emeritus); Bryan Baker

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