

MILADY

TO BE SCANNED

STANDARD

7th Edition



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NAIL TECHNOLOGY



Australia • Brazil • Mexico • Singapore • United Kingdom • United States

**Milady Standard Nail Technology,
Seventh Edition**
Milady

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Preface

■ TO THE STUDENT

Congratulations! You have chosen a career filled with unlimited potential, one that can take you in many directions and holds the possibility to make you a confident, successful professional. As a nail professional, you will play a vital role in the lives of your clients. Your clients will come to rely on you to provide them with ongoing service, helping them to look and feel their best.

According to *Nails* magazine industry statistics, in 2013, professional nail technicians performed more than 7.5 billion dollars' worth of manicuring, pedicuring, and nail enhancement services for millions of fashion-conscious clients in the United States. The business of nails continues to progress and grow with new breakthroughs in product technologies, application techniques, and business strategy. The need for educated and competent nail technicians is expanding in the same way. *Milady Standard Nail Technology*, 7th edition, is the complete first step to basic nail technology that all professional nail technicians need to kick off their career.

You are fortunate because you will learn from gifted instructors who will share their skills and experiences with you. You will meet other industry professionals at seminars, workshops, and conventions where you will learn the latest techniques, specific product knowledge, and management procedures. All of the experiences in which you have the opportunity to participate will provide you with additional insights into the profession you have chosen. You will build a network of professionals to turn to for career advice, opportunity, and direction. Whatever direction you choose, we wish you a successful and enjoyable journey!

■ TO THE INSTRUCTOR

This seventh edition of *Milady Standard Nail Technology* was prepared with the help of many instructors and professionals. Milady surveyed instructors, practicing nail professionals, and state board officials from across the United States and received in-depth comments from a host of experts to learn what needed to be changed, added, or deleted from the previous edition.

Milady Standard Nail Technology, 7th edition, contains new and updated information on many subjects, including infection control, product chemistry, manicuring, pedicuring, electric filing, monomer liquid and polymer powder nail enhancements, and UV and LED gels. Chapter 19, The Creative Touch, is loaded with the latest nail art mediums and techniques.

As instructors you asked Milady to make your job easier by aligning overlapping content between *Milady Standard Nail Technology* and *Milady Standard Cosmetology*, and we listened! This alignment includes the following chapters: History and Opportunities; Life Skills; Your Professional Image; Communicating for Success; Infection Control: Principles and Practices; General Anatomy and Physiology; Skin Structure, Growth, and Nutrition; Nail Structure and Growth; Nail Disorders and Diseases; The Basics of Chemistry; The Basics of Electricity; Seeking Employment; On the Job, Business Skills; Manicuring; Pedicuring; Monomer Liquid and Polymer Powder Nail Enhancements; and UV Gels. We also listened when you asked for photographs and art that depict nail technicians performing

their work and serving their clients; we conducted a 6-day photo shoot to update more than 230 pieces of art throughout the book, including procedural art.

■ FEATURES OF THIS EDITION

In response to *your needs*, this exciting new edition of *Milady Standard Nail Technology*, 7th edition, includes the following features:

- **Chapters and Parts.** The book is organized into 22 chapters and four parts—making it is very easy to use.
- **Full-Color Art.** All art is in full color, with brand-new photographs to show you step-by-step procedures for manicuring, pedicuring, tips and wraps, electric filing, monomer liquid and polymer powder nail enhancements, UV gels, and a completely new basic nail art.
- **Learning Objectives and Review Questions.** Learning objectives provide measurable outcomes-based goals for the students in each chapter. These objectives are reinforced by review questions that assess how well the student has mastered the goals established in the learning objectives.
- **Actual Photos of Skin and Nail Disorders and Diseases.** Full-color photos are included to help students identify skin and nail disorders and diseases more accurately.
- **Client Consultation Guidelines.** A complete chapter focuses on client consultation and gives suggestions for identifying and meeting the needs of each individual client.
- **Chemical Safety Coverage.** A complete chapter is devoted to the important topic of chemical safety in the nail salon. Students will learn to identify the chemicals commonly used in the nail salon, how they can cause harm, how to protect themselves and their clients, and how to read Safety Data Sheets (SDSs) (formerly known as Material Safety Data Sheets [MSDSs]).
- **State Licensing Exam Topics.** The topics required for state licensing examinations are presented in a complete, easy-to-read fashion.
- **Safety Cautions.** Highlighted safety cautions alert students to services that include potentially dangerous procedures. These cautions explain how to avoid dangerous situations and how to provide services in a safe, clean environment.
- **Tips.** These tips provide hints on the most efficient and effective ways to complete step-by-step procedures and help students improve their nail technology skills.
- **Regulatory Agency Alerts.** Because state regulations vary, regulatory agency alerts remind students to check with their instructors for specific regulations in their state.
- **Business Tips.** These tips help nail technicians improve their business relations to achieve complete customer satisfaction.





- **Application Tips.** These tips give additional insight to nail technicians as they perform the service procedures.
- **Web Resources.** Throughout the text, the reader will be directed to a variety of useful and informational Web sites that they can use in and out of school.

■ SUPPLEMENTS FOR THE STUDENT AND INSTRUCTOR

Milady Standard Nail Technology, 7th Edition, features these supplements:

Available Translations

- **SPANISH TRANSLATED MILADY STANDARD NAIL TECHNOLOGY CORE TEXTBOOK**
 - A Spanish translation of the core textbook
- **SPANISH STUDY RESOURCE FOR MILADY STANDARD NAIL TECHNOLOGY**
 - A Spanish translation of the student Workbook and the Exam Review
- **VIETNAMESE TRANSLATED STUDY SUMMARY FOR MILADY STANDARD NAIL TECHNOLOGY**
 - *This translated text includes the chapters most requested by nail tech schools with significant Vietnamese student populations, including Infection Control; Nail Disorders and Diseases; Nail Structure, Growth, and Nutrition; Manicuring; Pedicuring; Electric Filing; Nail Tips; and Wraps; UV Gels; The Creative Touch (nail art); and the glossary of key terms and definitions from the core textbook.*
 - *Exam review questions in Vietnamese*

Milady Standard Nail Technology Workbook

This interactive workbook provides students with exercises, problems to solve, ideas to think about, and resolutions to create that will engage their interest and contemplative skills. The four-color workbook includes short-answer and short essay questions; sentence completion, matching, definition, and labeling activities; crossword puzzles; and word review activities. The workbook also includes tips on preparing for the practical exam.

Milady Standard Nail Technology Student Exam Review

This student book of exam reviews contains multiple-choice-type questions similar to those found on state nail technology licensing exams. Questions are arranged in groups under major subject areas.

New Student Supplement: Milady Standard Nail Technology Coursemate

CourseMate is an online tool that combines classroom management with interactive student tools. CourseMate provides instructors with all the reporting tools they need to track student engagement, while students access interactive study tools in a dynamic, online learning environment.

Get Started with Coursemate:

1. Students receive a Printed Access Card that contains a code and instructions for accessing their course.
2. Instructors set up free access to CourseMate through Milady.
3. Through a simple process, instructors set up a unique course key to share with their students that will enable the engagement tracker to begin tracking each student's activity.

Component 1	Component 2	Component 3
Interactive eBook	Student Learning Pathway	Engagement Tracker
Features highlighting, note taking, book marking, and in-text search so that students can immediately jump to the section they need to reference.	Includes Chapter Preparation, Study Notes, Audio Glossary, Flash Cards, Quizzes, Videos, Crossword Puzzles, and Games. Each of these activities is reported directly to the Engagement Tracker so that the instructor is aware of the student's progress.	A Web-based reporting and tracking tool that allows the instructor to see each student's progress across all of the activities. View an individual student's progress through each of the tools, including time spent and, where applicable, grades and completion percentage. Also, view a class as a whole and immediately identify the students that need help.

Milady Standard Nail Technology Course Management Guide on CD

This step-by-step, simple-to-use course guide has been designed specifically to help the nail technology instructor set up and operate a successful nail technology training program. It includes:

- Guidelines for starting and implementing a nail technology program
- Detailed lesson plans for each chapter in the book along with a chapter test
- Learning reinforcement ideas or activities that can be implemented in the nail technology classroom
- Answers to review questions at the end of each textbook chapter and answers to the *Milady Standard Nail Technology Workbook*
- A computerized test bank for instant creation of review tests with answer keys
- An image library that includes all images in the text for use as handouts or in PowerPoint® presentations

Milady Standard Nail Technology Instructor Support Slides

The Instructor Support Slides contain a complete PowerPoint® presentation for every textbook chapter along with a new interactive feature of audio pronunciation for difficult terminology.

Milady Standard Nail Technology DVD Series

This ALL NEW DVD series brings to life complete coverage of the practical applications of the textbook. This series will enhance classroom learning and is essential for remedial work and individual learning.

Instructor Website for Milady Standard Nail Technology

This new instructor Web site contains all the content an instructor needs in one password-protected Web site. The instructor Web site includes the materials found in the following individual products:

- The Course Management Guide on CD
- The Instructor Support Slides
- Answers to the English and Spanish workbooks

About the Authors

■ ALISHA RIMANDO BOTERO

Alisha Rimando Botero is recognized as one of the nail industry's leading experts in training and education. In her first 2 years as an educator, she taught classes in over 100 beauty schools and vo-techs across the United States. In her 14 years of experience, Botero's work has been described as "groundbreaking"; she has been a platform artist and motivational speaker for more than 1,500 promotional and educational events. She has competed in over 100 nail competitions around the globe, winning a World Championship in 2005. Botero has worked with R&D chemists to develop artificial nail enhancement products, nanotechnology skin care and cuticle treatments, polish collections, and natural nail treatments. One of her innovative product lines was awarded an industry ABBIE for best packaging, and several others have been recognized with readers' choice awards for best products.

As executive vice president and creative director of Artistic Nail Design, Botero continues to challenge herself and her team to create high-quality products and superior education for the professional nail market.



Photo courtesy of Alisha Rimando Botero

■ JOHN HALAL

John Halal began his career in the beauty industry as a hairstylist over 43 years ago. He is a licensed cosmetology instructor, a former salon and school owner, and currently the director of education at Tricoci University of Beauty Culture. Halal is an affiliate member of the Society of Cosmetic Chemists (SCC) and the treasurer of Beauty Changes Lives (BCL). He is the immediate past president of the American Association of Cosmetology Schools (AACS) and the current president of the Indiana Cosmetology and Barbering Association (ICBA). John is the author of *Hair Structure and Chemistry Simplified* and *Milady Hair Care and Product Ingredient Dictionary*. He is also a contributor to the *Milady Standard Cosmetology Textbook* and several other Milady publications. Halal obtained his associate's degree, with highest distinction, from Indiana University. He is a member of the Golden Key National Honor Society and Alpha Sigma Lambda. He has authored numerous articles on a wide variety of topics and been published in several professional trade magazines. He often travels as a guest speaker to address both professional and consumer groups.



Photo courtesy of John Halal

■ MARY ANN KILGORE

Mary Ann Kilgore holds a B.A. in psychology and a M.A. in industrial organizational psychology. She is a licensed cosmetologist. After graduating from high school, she followed her passion for beauty and enrolled in cosmetology school. She opened a full-service salon just 5 years after graduating. With salon ownership experience and over a dozen years of dedication as a hair designer, she can clearly relate to the role of being a manager in a creative industry. Kilgore has a thirst for learning; while working in the salon during the day, she attended college and earned her master's degree in psychology in 2001. She transitioned her career into a corporate role and still maintained a small clientele.



Photo courtesy of Mike Steele



With more than 15 years of training development and facilitation experience, Kilgore has designed and delivered a wide range of learning solutions for teams in areas such as finance, human resources, customer service, operations, manufacturing, and the beauty industry. She has also managed a team of beauty consultants in a leading retail beauty store. She now holds a position as a salon consultant for a national beauty product company and works as a nail technologist.

■ JIM MCCONNELL

Jim McConnell received his B.S. in chemistry from the University of Oregon in 1986. He has been a chemist in the field of polymers since 1988. After graduating from the University of Oregon, he worked as a catalytic chemist in the petroleum industry and as a urethane and epoxy chemist in the wood products, concrete coating, and steel coating industries for 12 years. He and his wife, Lezlie, founded McConnell Labs, Inc., in 1998, making Light Elegance Nail Products for their salon in Eugene, Oregon. They soon began selling the UV gel products internationally. McConnell has contributed to numerous nail technology magazines around the world to answer questions, contribute chemistry, and explain UV light technology. He has served on the board of various committees for SSPC (Steel Structures Painting Council) and NACE (National Association of Corrosion Engineers).



■ JANET MCCORMICK, MS, CIDESCO

Janet McCormick is a licensed and experienced esthetician and manicurist, a sought-after trainer, a former spa director, and the former owner of successful salons. The author of three books, she has also contributed chapters to the industry's leading textbooks for two specialties and written hundreds of highly respected articles in the beauty industry trade magazines.

McCormick is co-owner of Medinail Learning Center, which provides two certifications—the Advanced Nail Technician certification program for salon-based nail technicians and the Medical Nail Technician certification, a program to prepare nail technicians to work in podiatry offices. She is also owner of Spa Techniques, a consulting and training firm, and writes under that banner.

■ VICKI PETERS

As a nail technician, Vicki Peters has wowed the industry with her championship nails. As a cover artist and author, her work has been published worldwide more than any other tech in the history of the nail business. As an educator, she has trained techs from Russia, Germany, Japan, Ireland, the United Kingdom, Canada, Mexico, Africa, Australia, and the United States. As an industry leader, she has mentored thousands and pioneered the industry to new levels. Peters is a 31-year veteran nail technician, past competition champion, judge and competition director, technical educator, and featured business speaker. She is also author of the *Milady Nails Q&A Book*, *Drilltalk*, *The Competitive Edge*, and *Novartis' Nail Healthy Guide*. Her nail artistry has been on the covers of *TV Guide*, *Dayspa*, *Nails*, *Nailpro*, *Nailpro Europe*, and numerous fashion magazines. Her expertise in the nail business ranges from salon work and hands-on technical experience to R&D, education, and lecturing worldwide.



■ DOUGLAS SCHOON

Doug Schoon has over 30 years of experience as a research scientist, international lecturer, author, and educator; he has become a recognized authority in the professional beauty industry. He led Creative Nail Design's (CND) research and development program for 19 years, and for the last 6 years has been president of his own consulting firm, Schoon Scientific. He works as a strong advocate for salon safety and represents the professional nail industry on scientific and technical issues in the United States, Europe, Canada, Australia, and Japan.

Schoon is the author of several books and video and audio training programs as well as hundreds of articles about salon chemicals, chemical safety, and disinfection. As a writer and speaker, he is applauded for his ability to make complex theories and concepts seem interesting and easy to understand. His latest book, *Nail Structure & Product Chemistry, Second Edition*, Cengage Learning, is also considered an excellent resource for nail professionals. Currently, Schoon is a co-chair of the Nail Manufacturers Council (NMC) of the Professional Beauty Association (PBA).

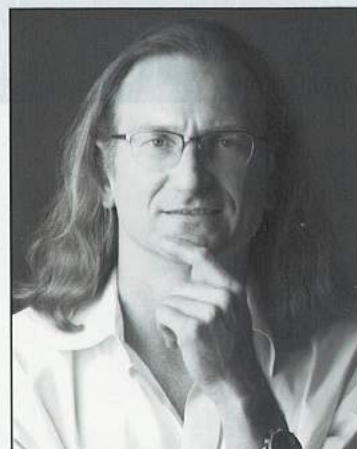


Photo courtesy of Doug Schoon

■ JERYL E. SPEAR

Jeryl Spear is a veteran stylist and previous salon owner who perfected her craft over a 20-year stint in the beauty business. After spending 4 years as executive editor of Beauty Launchpad, in 2011 Jeryl became the editor in chief and creative director of *HOT* beauty magazine, a leading trade publication (print and digital) that focuses on all specialties within the professional-beauty industry (<http://www.hot.hairshow.us>).



Photo courtesy of Jeryl Spear

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Orientation

CHAPTER 1

History
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CHAPTER 3

Your Professional Image

CHAPTER 4

Communicating for Success