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COSMETOLOGY

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Preface

Milady Standard Cosmetology



Mr. Nicholas F. Cimaglia, Founder of Milady Publishing Company

Congratulations! You are about to begin a journey that can take you in many directions and that holds the potential to make you a confident, successful professional in cosmetology. As a cosmetologist, you will become a trusted professional—the person your clients rely on to provide ongoing services that enable them to look and feel their best. You will become as personally involved in your clients' lives as their physicians or dentists, and with study and practice, you will have the opportunity to showcase your artistic and creative talents for the entire world to see!

You and your school have chosen the perfect course of study to accomplish all of this and more. *Milady Standard Cosmetology* was the creation of Nicholas F. Cimaglia, founder of Milady Publishing Company, in 1927. The very first edition of *Milady Standard Cosmetology* was published in 1938, and since that time, many of the world's most famous, sought-after, successful, and artistic professional cosmetologists have studied this very book!

Milady employs experts from all aspects of the beauty profession—hair care, skin care, nail care, massage, makeup, infection control, and business development—to write for and consult on every textbook published. Since the field of cosmetology is always changing, progressing, and discovering new technologies, services, and styles, Milady keeps a close eye on its content and is committed to investing the time, energy, resources, and efforts to revising its educational offerings to provide the beauty industry with the most up-to-date and all-encompassing tools available.

So you see, by studying the *Milady Standard Cosmetology*, you have not simply opened the cover of a textbook, you've been adopted by a family of the most well-known and highly respected professional cosmetology educators in the world!

The Industry Standard

Since 1927, Milady has been committed to quality education for beauty professionals. Tens of millions of licensed cosmetologists began their career studying from the industry leading *Milady Standard Cosmetology*.

We at Milady are dedicated to providing the most comprehensive learning solutions in the widest possible formats to serve YOU, today's student. The newest edition of *Milady Standard Cosmetology* is available to you in a variety of formats such as the traditional print version, an eBook version, as well as included within an online course that also provides hours of video. Since we know today's student is always "on the go," we also have an app that helps you prepare for the state board exam.

Milady would like to thank the hundreds of educators and professionals who participated in surveys and reviews to identify what needed to be changed, added, or deleted from the previous edition. We are honored to bring you current information from industry icons like Ted Gibson, Jason Backe, and Carlos Cintron.

Thank you for trusting Milady to give you invaluable information that will help build the foundation of your career. Our content combined with your passion, creativity, dedication to hard work, and commitment to customer service will set you on a path to a lifetime of success in the beauty industry. Congratulations for taking the first step toward having a beautiful career!



Sandra Bruce, Executive Director for Milady

Sandra Bruce
Executive Director, Milady

New to this Edition

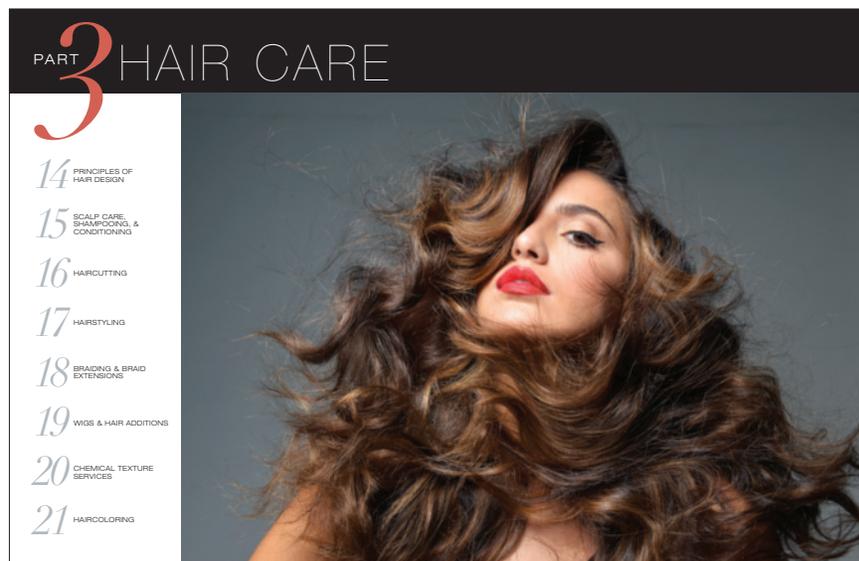
In response to the suggestions of the cosmetology educators and professionals who reviewed the *Milady Standard Cosmetology* and to those submitted by students who use this text, this edition includes many new features and learning tools.

Design

Milady and Ted Gibson joined forces to dramatically transform the cover and interior design of the textbook—it now has a classic, inspirational, sophisticated feel—to reflect the timeless, innovative, and fun hair styles, cuts, and makeup found in the beauty business. Using feedback by students, the designers used fewer background colors to provide more white space for you to take notes on the pages themselves.

Photography and Art

Milady conducted a photo shoot in New York City with a wide network of hairstylists and models, to capture more than 700 new, four-color photographs to appear throughout the book, in both chapter content and step-by-step procedures. In addition, all of the new procedure photographs were taken using live models, instead of mannequins. The part opener image in Part 3 and many of the chapter openers features one of the stunning photos taken at the photo shoot. Ted Gibson and his assistants perfected the hair on each model, while EMMY award-winning makeup artist, Valenté Frazier finessed the makeup.



Pre- and Post-Service Procedures

To drive home the point that pre-service cleaning, disinfecting, and preparing for the client are important, you will find that a unique Pre-Service Procedure has been created to specifically address the individual



needs of each part—hair care, skin care, and nail care. Additionally, a Post-Service Procedure has been created to address cleaning, disinfecting, and organizing after servicing a client. Both the Pre-Service and Post-Service Procedures appear in every part of the text for you to quickly and easily refer to and follow.

Left-Handed Instruction

Based on feedback from previous editions, Milady continues to include left-handed procedures in the haircutting and hairstyling chapters with full color photography. A great feature for left-handed students, as they will see professionals using their left hand to hold and manipulate the hair and tools.

Study Tools

In order to test your knowledge, you will find a section at the end of every chapter dedicated to Study Tools. This is a reminder that you have resources in addition to your printed textbook to evaluate and practice your own skills. The online course for cosmetology includes an interactive eBook, online quizzes, exercises, PowerPoint® slides, discussion questions, video, and study notes to bring concepts you are learning in the classroom to life.

Learning Objectives

At the beginning of each chapter is a list of learning objectives that tell you what important information you will be expected to know after studying the chapter. Throughout the chapter, learning objectives also originate above the main topic where the objectives will be met in the subsequent paragraphs. This is done for ease of reference and to reinforce the main competencies that are critical to learn in each chapter to prepare for licensure. This duplication is an indication to the reader that the objective can be accurately measured by reading, understanding, and practicing to achieve all of the outcomes for the lesson.

17

LEARNING OBJECTIVES
After completing this chapter, you will be able to:

- LO** Execute finger waving, pin curling, roller setting, and hair wrapping.
- LO** Perform various blowdry styling techniques and learn the proper use of blowdrying tools.
- LO** Demonstrate the proper use of thermal irons.
- LO** Demonstrate the proper use of a flat iron and show an understanding of heat settings.
- LO** Demonstrate various thermal iron manipulations and explain how they are used.
- LO** Perform the four basic curl patterns and explain the end result.
- LO** Describe the three types of hair pressing.
- LO** Understand the importance of preparation, sectioning, pinning, and balance with regard to updos.
- LO** Create the two foundational updos for styling long hair.

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HAIRSTYLING

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Combination of Key Terms and Glossary List

A complete list of key terms now appears as part of the glossary located at the end of each chapter. In addition to the key terms, you will find the *page reference* for where the key terms are defined and discussed in the chapter material. *Phonetic spellings* for difficult terms are included along with the glossary definition. The combined key term and chapter glossary is a way to learn important terms that are used in the beauty industry and in preparation for licensure. This list is a one-stop resource to create flash cards or study for quizzes on a particular chapter.

All key terms are included in the **Chapter Glossary**, as well as in the **Glossary/Index** at the end of the text.

New Organization of Chapters

The information in this text, along with your teachers' instruction, will enable you to develop the abilities you need to build a loyal and satisfied clientele. To help you locate information more easily, the chapters are grouped into six main parts.

PART 1 ORIENTATION

Orientation consists of four chapters that cover the field of cosmetology and the personal skills you will need to become successful. Chapter 1, History and Career Opportunities, outlines how the profession of cosmetology came into being and where it can take you. In Chapter 2, Life Skills, the ability to set goals and maintain a good attitude is emphasized, along with the psychology of success. Chapter 3, Your Professional Image, stresses the importance of inward beauty and health as well as outward appearance, and Chapter 4, Communicating for Success, describes the important process of building client relationships based on trust and effective communication.



PART 2 GENERAL SCIENCES

General Sciences includes important information you need to know in order to keep yourself and your clients safe and healthy. Chapter 5, Infection Control: Principles and Practices, offers the most current, vital facts about hepatitis, HIV, and other infectious viruses and bacteria and explains how to prevent their spread in the salon. Additional content discuss the types of foot spas and best practices for cleaning and disinfecting the various pedicure units. The remaining chapters in Part 2—General Anatomy and Physiology; Skin Structure, Growth, and Nutrition; Skin Disorders and Diseases; Nail Structure and Growth; Nail Disorders and Diseases; Properties of the Hair and Scalp; Basics of Chemistry; and Basics of Electricity—provide essential information that will affect how you interact with clients and how you use service products and tools.





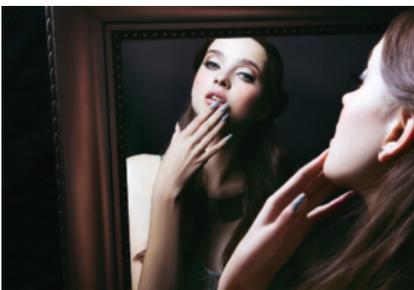
PART 3 HAIR CARE

Hair Care offers information on every aspect of hair. Chapter 14, Principles of Hair Design, explores the ways hair can be sculpted to enhance a client's facial shape. The foundation of every hair service is covered in Scalp Care, Shampooing, and Conditioning, followed by an updated Haircutting chapter, complete with step-by-step procedures for core cuts with fantastic new glamour shots to show the finished look. Step-by-step procedures are also found in Hairstyling, which includes information on new tools and techniques. Another revised chapter, Braiding and Braid Extensions, is followed by Wigs and Hair Additions, and both Chemical Texture Services and Haircoloring reflect the most recent advances in these areas.



PART 4 SKIN CARE

Skin Care focuses on another area in which new advances have altered the way students must be trained. This part begins with a chapter on Hair Removal, which covers waxing, tweezing, and other popular methods of removing unwanted hair from the face and body. Lip waxing is now covered as a full step-by-step procedure. Next, the basics of skin care is covered in Facials and makeup application in Facial Makeup. These two chapters offer the critical information you'll need for these increasingly requested services in the expanding field of esthetics. Procedures are included for many of the services offered in salons and day spas.



PART 5 NAIL CARE

Nail Care contains completely revised chapters including Manicuring, Pedicuring, Nail Tips and Wraps, Monomer Liquid and Polymer Powder Nail Enhancements, and the Light Cured Gels chapter, with expanded information on nail art. The UV Gels chapter was renamed for this edition as Light Cured Gels to include both UV and LED gels.



PART 6 BUSINESS SKILLS

Business Skills opens with the updated chapter title, Preparing for Licensure and Employment. This chapter prepares students for licensure exams and job interviews, and it explains how to create a resume and a portfolio. What you will be expected to know and do as a newly licensed cosmetologist is described in On the Job. This chapter offers tips on how to make the most of your first job—including the importance of learning all you can. The final chapter, The Salon Business, exposes students to the numerous types of salons and salon ownerships available to them.

Additional Features of this Edition

As part of this edition, many features are available to help you master key concepts and techniques.



FOCUS ON

Throughout the text, short paragraphs in the outer column draw attention to various skills and concepts that will help you reach your goal. The **Focus On** pieces target sharpening technical and personal skills, ticket upgrading, client consultation, and building your client base. These topics are key to your success as a student and as a professional.



DID YOU KNOW?

This feature provides interesting information that will enhance your understanding of the material in the text and call attention to a special point.



ACTIVITY

The **Activity** boxes describe hands-on classroom exercises that will help you understand the concepts explained in the text.



HERE'S A TIP

These helpful tips draw attention to situations that might arise and provide quick ways of doing things. Look for these tips throughout the text.



CAUTION

Some information is so critical for your safety and the safety of your clients that it deserves special attention. Be sure to direct your attention to the information in the **Caution** boxes.



STATE REGULATORY ALERT!

This feature alerts you to check the laws in your region for procedures and practices that are regulated differently from state to state. It is important, while you are studying, to contact state boards and provincial regulatory agencies to learn what is allowed and not allowed. Your instructor will provide you with contact information.



WEB RESOURCES

The **Web Resources** provide you with Web addresses where you can find more information on a topic and references to additional sites for more information.



FOCUS ON

Being a Good Teammate

While each individual may be concerned with getting ahead and being successful, a good teammate knows that no one can be successful alone. You will be truly successful if your entire salon is successful!



DID YOU KNOW?

Autoclaves penetrate contaminated instruments better than liquid disinfectants and offer complete destruction of all bacterial, viral, and fungal contamination.



ACTIVITY

Research the Web for local and state procedures for licensing electrical, light, and laser therapy devices. Also look at the labels, precautions, and warning labels on various styling tools in your class and home. Discuss your observations in class.



HERE'S A TIP

Remember: Salon professionals are not allowed to treat or recommend treatments for infections, diseases, or abnormal conditions. Clients with such problems should be referred to their physicians.



CAUTION

Do not use negative galvanic current on skin with broken capillaries or pustular acne conditions or on clients with high blood pressure or metal implants.



STATE REGULATORY ALERT!

Always be certain that you are in compliance with your state's regulations for licensing and use of electric current devices.



WEB RESOURCES

For more information on electricity and energy, visit the U.S. Energy Information Administration's website at eia.doe.gov or the Library of Congress' website at loc.gov and enter the search words *electricity* or *energy*.



There is much confusion within the beauty industry about the proper use of the terms sanitation, which is nothing more than garbage removal (think of what your city's department of sanitation does), and cleaning, as well as sanitizing, disinfecting, and sterilizing. In an effort to clarify these critical terms, Milady opted to consistently use cleaning instead of using cleaning to one meaning and sanitizing for sanitation in another context.

It is necessary that many professionals in the haircare and scientific communities (all disease prevention and epidemiology and associated, such as The Association for Professionals in the Haircare and Epidemiology) generally do not use the terms interchangeably either. Instead, it is more common for infection control professionals to use the terms *cleaning*, *sanitizing*, and *sterilizing*. Infection control professionals consider sanitation a hygiene term or a product marketing term (as in *hand sanitizer*).

The term *clean* is defined: A mechanical process (scrubbing) using soap and water on designed and tested to remove all visible dirt, debris, and many disease-causing germs. Cleaning also removes invisible debris that associates with disinfection. Cleaning is what cosmetologists are required to do before disinfecting.

The term *sanitizing* is defined: A chemical process for reducing the number of disease-causing germs on shared surfaces to a safe level.

The term *disinfectant* is defined: A chemical process that uses specific products to destroy harmful organisms on environmental surfaces.

Consider this scenario: You are a new employer of a salon that offers hair and nail services. At the end of the day, the salon manager asks you to help clean and disinfect the combs, manicure tools, implements, and pedicure equipment. Your manager also asks you to enter the cleaning and disinfection information on the salon's logbook. You know how important it is to follow the proper cleaning and disinfection procedures in the salon. This chapter will give you the principles and practices you need to complete these tasks.

why study
INFECTION CONTROL: PRINCIPLES AND PRACTICES?

Cosmetologists should study and have a thorough understanding of infection control principles and practices because:

- To be knowledgeable, successful, and respectable professional in the field of cosmetology, you are required to understand the types of illness-causing pathogens you may encounter in the salon.
- Understanding the basics of cleaning and disinfecting and following federal and state rules will safeguard you and your clients.
- Understanding the cleaning and disinfecting products that you use and how to use them will help keep you, your clients, and your salon environment protected from potential pathogens and their modes of transmission.

70 PART 2 | GENERAL SCIENCES

Why Study This?

Milady knows, understands, and appreciates how excited students are to delve into the newest and most exciting haircutting, styling, and coloring trends, and we recognize that students can sometimes feel restless spending time learning the basics of the profession. To help you understand why you are learning each chapter's material, and to help you see the role it will play in your future career as a cosmetologist, Milady added this section to each chapter. The section includes bullet points that tell you why the material is important and how you will use the material in your professional career.

Procedures

All step-by-step procedures offer clear, easy-to-understand directions and multiple photographs for learning the techniques. At the beginning of each procedure, you will find a list of the needed implements and materials, along with any preparation that must be completed before the procedure begins. At the introduction of several procedures, you will find photographs showing the finished result.

In previous editions, the procedures interrupted the flow of the main content, often making it necessary for readers to flip through many pages before continuing their study. In order to avoid this interruption, all of the procedures have been moved to a special **Procedures** section at the end of each chapter.

For those students who may wish to review a procedure at the time it is mentioned in the main content, Milady added Procedural Icons. These icons appear where each procedure is mentioned within the main content of the chapter, and they direct you to the page number where the entire procedure appears.

P 20-12

CURL RE-FORMING (SOFT CURL PERM)



IMPLEMENTS & MATERIALS

You will need all of the following implements, materials, and supplies:

<input type="checkbox"/> Applicator bottle	<input type="checkbox"/> Gentle clarifying shampoo	<input type="checkbox"/> Plastic processing cap	<input type="checkbox"/> This step lotion
<input type="checkbox"/> Applicator brush	<input type="checkbox"/> Protective base cream	<input type="checkbox"/> This neutralizer solution	
<input type="checkbox"/> Conditioner	<input type="checkbox"/> Large-tooth comb	<input type="checkbox"/> Tail comb	
<input type="checkbox"/> Disposable gloves	<input type="checkbox"/> Plastic or glass bowl	<input type="checkbox"/> This cream relaxer	

PREPARATION **PROCEDURE**

Perform:

1. Perform an analysis of the hair and scalp. Perform tests for porosity and elasticity. Remember, this procedure requires that the hair and scalp be completely dry. Most manufacturer's directions indicate that a shampoo may be necessary before a soft curl service; if so, shape the client for a shampoo and gently shampoo with a mild shampoo and towel-dry hair. Avoid irritating the client's scalp.
2. Re-shape the client for a chemical service.
3. Based on the manufacturer's recommendation for preliminary strand test, conduct strand test to determine proper timing and curl pattern prior to full-head application. Make note of the timing for the This cream relaxer, strength used, and rest time.

CAUTION

⚠ Hair that has been treated with hydroxide relaxers cannot be treated with soft curl perm. The chemicals are not compatible.

Meet the Team

Creative Director



© Ted Gibson

Ted Gibson

“Beauty is individual”

Ted Gibson is one of the most sought-after editorial, runway, and celebrity hair stylists in the business. His work has appeared in publications such as *Vogue*, *Harper’s Bazaar*, *Elle*, *Marie Claire*, *Vanity Fair*, *People*, *StyleWatch*, *W*, and *Allure*

and at runway shows such as Chanel, Prada, and Dolce & Gabbana. He is also a huge influence and presence at both fall and spring New York Fashion Week styling some of the top American fashion designer labels including Rachel Roy, Carmen Marc Valvo, and Lela Rose. Ted is perhaps most known for toiling over the tresses of top celebrities including Lupita Nyong’o, Anne Hathaway, Debra Messing, Angelina Jolie, Ashley Greene, Joy Bryant, Zoe Saldana, Emma Watson, Gabrielle Union, and many more.

Considering his background, it’s not surprising that Ted’s incredibly successful Flatiron salon in New York City is frequented by models, actresses, fashion and beauty insiders, and influential women who love its modern vibe and its discreet, down-to-earth flavor of chic. The Fort Lauderdale, Florida is the newest ted gibson salon located in the W Hotel and opened November 2011. Ted was also the resident hair guru on TLC’s *What Not To Wear* until

2013, and responsible for the participants life-changing makeovers.

On top of all this, his luxurious product line offers unique, innovative products that have developed a loyal following, as well as being honored with industry accolades and awards. His products, including shampoos, conditioners, and styling products were an immediate success and sold out within hours on QVC. The Ted Gibson hair sheets have become a cult product and beauty closet staple amongst celebrities, editors, and salon clients all over the world.

Born in Texas and raised in a military family, Ted moved from one exotic location to another, living in Germany, Hawaii, and Japan. This experience opened up a whole new world for Ted, as he learned at an early age to appreciate the beauty of different cultures. Upon returning to the Lone Star State, Ted followed his passion and pursued his dream career.

An influential style maker, Ted is a regular contributor on *The Today Show* and has also appeared on *Oprah*, *The Insider*, *Good Morning America*, *Inside Edition*, *Entertainment Tonight*, *The Early Show*, *FOX News*, *CNN American Morning*, and *ABC News*.

Today, Ted divides his time between working with clients, managing the ted gibson salons, and creating new products. His career as a fashion, runway, editorial, and celebrity stylist continues to thrive taking him around the world, where the beauty of different cultures inspires him, and where exciting new projects continue to challenge and fulfill him.

Contributors



© Jason Backe

Jason Backe

Chapter 21 Haircoloring
Chapter 32 The Salon Business

Over the span of his career, Jason Backe has established himself as a highly accomplished color artist. He is one of the most sought after hair colorists in New York and Florida, and his appointment book at ted gibson salons, which he

co-owns with partner Ted Gibson, is always full. Jason considers hair color an artistic expression of personal beauty and takes great pride in his attention to detail and commitment to impeccable customer care. Jason has worked with celebrities such as Renée Zellweger, Anne Hathaway, Ashley Greene, Christina Ricci, Elettra Wiedemann Rosselini, and Lake Bell.

Jason began his career studying and working at the Aveda Institute Minneapolis where he traveled the world educating stylists, salon owners, and managers in both hair cutting and coloring techniques and business building. He was recently named Celebrity Colorist for L’Oreal Professionnel and was one of the first colorists to adopt their revolutionary ammonia-free INOA hair color. He is

on the Color Advisory Board for The Colorist and is a part of Intercoiffure America/Canada Color Council. Today, he also guides and motivates his own staff at ted gibson salon. As CEO of tedgibsonbeauty, Jason is intimately involved with the creation of new ted gibson products, which are fast gathering a devoted following. Known for uniqueness and innovation, the line has been honored with several industry accolades and awards from esteemed publications such as *Women's Wear Daily* and *Redbook*.



Carlos Cintron

Chapter 1 History & Career Opportunities
Chapter 16 Haircutting
Chapter 17 Hairstyling

Recognized for his exceptional hairdressing and presentation skills, Carlos Cintron is among the world's foremost hair stylist. He rose to

prominence at the beginning of the millennium by becoming the 2002–2003 Hairdresser of the Year at the world renowned Toni&Guy™.

Carlos's career in hair was formed at Toni&Guy™, where he began as an assistant to the late Guy Mascolo. He swiftly progressed through the company's legendary training schemes to become part of the International Creative Team, where he brought his expertise and creative ideas to hairdressers across the world.

Carlos was later asked to join the TIGI Session Team where Guy's younger brother mentored him, three-time winner of British Hairdresser of the Year, Anthony Mascolo. He worked Fashion Week for some of the world's top fashion designers and traveled the globe sharing the latest collections and trends inspired by fashion. Additionally, Carlos has worked at some of the top runway shows as both stylist and consultant, including Badgley Mischka, Narciso Rodriguez, Custo Barcelona, Christopher Kane, Millie, Richard Chai, Lacoste, Catherine Malandrino, Nicole Miller, Pringles, Halston, among others. His clients have included celebrities and some of the fashion industry's top models.

In 2011, Carlos won the Texture category at the North America Hairstyling Awards and was a finalist for Hairstylist of the Year. He has appeared on national television creating makeovers, and his work has been published in high fashion and editorial magazines such as *Numero*, *Nylon*, *Marie Claire*, and *Vogue España* (Spanish), among others.

Diane DaCosta

Chapter 18 Braiding & Braid Extensions
Chapter 19 Wigs & Hair Additions

Diane DaCosta is a curly textured expert and author of *Textured Tresses, The Ultimate Guide to Maintaining and Styling Natural Hair* (Simon & Schuster, June 2004) and contributor to *Milady Standard Natural Hair Care and Braiding* (Milady, a part of Cengage Learning®, 2014).

With over 25 years in the beauty business, Diane has brought innovative curly styles to the forefront of today's multi-textured hair movement. A celebrity hair designer to the stars, she has had the pleasure of working with artists and celebrities, including seven-time Grammy winner Lauryn Hill, the Fugees, critically acclaimed actor Blair Underwood, rock star Lenny Kravitz, and many more.

Diane's cutting-edge styles have graced the pages of *The New York Times*, *EBONY*, *ESSENCE*, *British Elle*, *French Vogue*, *Heart & Soul*, *JUICY*, *The Source*, *InStyle*, *Latin Girl*, *Latina.com*, *O Magazine*, *Rolling Stone*, *Sophisticates Black Hair*, *Vibe*, and *UPTOWN* magazines. She was also the first hair editor of *Honey* magazine. Diane is currently the owner and creative director of Simplee BEAUTIFUL, a luxury beauty hairstyling and accessory boutique in Westchester, New York.

Diane is also the founder and principal executive of Beautiful Fund, LLC. Beautiful Fund, LLC, is a creative consulting and marketing firm that provides expert beauty and conceptual development, publicity and promotional branding, guest appearances, inspirational speaking, and educational development. Most recently, Diane was named brand stylist for Carol's Daughter and was part of the expert panel behind the Carol's Daughter Transition Me Beautiful Contest. In this new role, Diane develops content for the Carol's Daughter Transitioning Movement website, devoted to supporting the transitioning lifestyle.



© Mizani

C. Jeanine Fulton

Chapter 2 Life Skills
Chapter 3 Your Professional Image
Chapter 4 Communicating For Success

C. Jeanine Fulton impacts thousands of professionals each year through her passion for writing and speaking. She possesses a unique ability to relate to audiences of all ages. Working by the motto, "Fun Education is the Best Motivation!" Jeanine teaches and creates professional performance and motivational programs for schools,

© C. Jeanine Fulton



universities, corporations, and non-profit organizations.

After completing her Bachelor of Science degree in Marketing in 1994, Jeanine pursued a career in the field of cosmetology. She also received a Master of Business Administration degree from Nova Southeastern University in 1999. Jeanine combined

her marketing and cosmetic flair, and became a consultant for one of the world's leading salon services companies.

In 2004, Jeanine started Persona Market Enterprises, a company that focuses on improving brands through education and training. Jeanine is also the author of *Industry In:Site, 101 Top Beauty Careers*, a one-of-a-kind career guide.

© Dr. Roychen Joseph



Dr. Roychen Joseph

- Chapter 11 Properties of the Hair & Scalp
- Chapter 12 Basics of Chemistry
- Chapter 13 Basics of Electricity

Dr. Roychen Joseph is the vice president of research and development at

Farouk Systems, Inc., in Houston, TX. He has more than 17 years of experience in the personal care industry in formulation and manufacturing. During his career, he has introduced hundreds of innovative products into the U.S. and international personal care market.

Dr. Joseph obtained a Bachelor of Science degree in Chemistry, Master of Science in Organic Chemistry, Master of Science in Industrial Polymers, and a PhD in Chemistry from reputed universities in India and Oklahoma State University. He has several research publications in peer journals. He is an active member of American Chemical Society (ACS) and Society of Cosmetic Chemists (SCC).

Mary Ann Kilgore

- Chapter 30 Preparing for Licensure and Employment
- Chapter 31 On the Job

Mary Ann Kilgore is a licensed and experienced cosmetologist and holds a Master's Degree in Industrial/

Organizational Psychology. She opened a full-service salon five 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.

In 1999, Mary Ann transitioned her career into the corporate arena and still maintained a small hair clientele. With over 12 years of corporate training experience, Mary Ann has designed and delivered a wide range of learning solutions for teams in Fortune 500 companies in areas such as finance, human resources, customer service, operations, and manufacturing.

In 2010, Mary Ann returned to the beauty industry in the role of International Training Manager for Minx Nails, Inc. She now works as a nail technologist in her studio in Laguna Beach, California and is a contract educator for Minx Nails.

Mary Ann has been involved with Milady since 2010, contributing to training design for the online platform. As a writer of manuscripts for subjects pertaining to beauty sales and leadership, she has also acted as a contributor for two core textbooks, *Milady Standard Cosmetology* (Milady, a part of Cengage Learning®, 2012) and *Milady Standard Nail Technology* (Milady, a part of Cengage Learning®, 2015). In 2012, she completed a revision of the professional product, *Retail Management for Salons and Spas* (Milady, a part of Cengage Learning®, 2012).

Dr. Mark Lees

- Chapter 7 Skin Structure, Growth, and Nutrition
- Chapter 22 Hair Removal
- Chapter 23 Facials

Dr. Mark Lees is one of the country's most noted skin care specialists and an award-winning speaker and product developer. He has been actively practicing clinical skin

care for over 20 years at his multi-award-winning, CIDESCO-accredited Florida salon, which has been awarded many honors by the readers of the *Pensacola News-Journal*, including *Best Facial*, *Best Massage*, and *Best Pampering Place*.



© Mary Ann Kilgore



© Dr. Mark Lees

His professional awards are numerous and include Esthetician of the Year from *American Salon Magazine*, the Les Nouvelles Esthétiques Crystal Award, the Dermascope Legends Award, the Rocco Bellino Award for Outstanding Education from the Chicago Cosmetology Association, Best Educational Skin Care Classroom from the Long Beach International Beauty Expo, and, recently, the 2012 Esthetics International Humanitarian Award from The Southern Spa and Salon Conference. Dr. Lees has also been inducted into the National Cosmetology Association's Hall of Renown.

Dr. Lees is a member of the Society of Cosmetic Chemists, and is author of the popular book *Skin Care: Beyond the Basics*, now in its fourth edition; *The Skin Care Answer Book*; and the recently released *Clearing Concepts: A Guide to Acne Treatment*.

Dr. Lees holds a PhD in Health Sciences, a Master of Science in Health, and a CIDESCO International Diploma. He is licensed to practice in both Florida and Washington State. His line of products for problem, sensitive, and sun-damaged skin is available at finer salons and clinics throughout the United States.

Veronique Morrison

Chapter 14 Principles of Hair Design
Chapter 15 Scalp Care, Shampooing, & Conditioning

Veronique Morrison is a 20-plus year industry professional with successes driven by advanced

education, opportunity, creative and technical skills, and her passion for the beauty business.

Veronique's technical and creative skill sets combine advanced knowledge and talent in natural hair chemistry, curl reformation, cutting, and styling. Her commentaries can be found on the editorial and tutorial pages of industry publications such as *Modern Salon*, Behind the Chair.com's *On Paper*, *Sophisticates Black Hair*, and *Essence* magazines, along with various online media sources including Naturally Curly.com, Behind the Chair.com, and *Essence.com*.

Coupled with ensuring advanced technical expertise, she works to enhance the creative presentation of the professional stylist. Her fervor is training and building skills and consumer awareness in the textured hair market. "I want most to be part of the success story of building more progressive hair stylists, more informed consumers, and more sustainable salon businesses," says Veronique.

Aliesh Pierce

Chapter 24 Facial Makeup

Aliesh Pierce has a diverse educational background, including having studied business management at Fisk University, Art History at the University of Houston, and Italian Language at The School for International Studies. She is the author of *Milady's Aesthetician Series: Treating Diverse Pigmentation* (Milady, a part of Cengage Learning®, 2013). With over 25 years of experience in the beauty industry, Aliesh is a makeup artist, esthetician, and consultant for cosmetic manufacturers. Her work has appeared in a variety of magazines, such as *Italian Elle*, *Vogue*, *Essence*, and *Les Nouvelles Esthetique*. Aliesh regularly shares her expertise with estheticians at various conventions like the International Congress of Esthetics and Spa, The Spa and Resort Expo, as well as the Cosmetology Educators Alliance. As a consultant, she helped Jafra Cosmetics International expand their color range by creating a product line for the African American market, launching the new products in the United States and Europe. Aliesh continues to work as a freelance consultant, lending her expertise to established and emerging brands.



Photography by Neil A. France

Alisha Rimando Botero

Chapter 9 Nail Structure & Growth
Chapter 10 Nail Disorders & Diseases
Chapter 25 Manicuring
Chapter 26 Pedicuring
Chapter 27 Nail Tips & Wraps
Chapter 28 Monomer Liquid & Polymer Powder Nail Enhancements
Chapter 29 Light Cured Gels

Alisha Rimando Botero is recognized as one of the nail industry's leading experts in training and education. In her first two years as an educator, Alisha taught classes in over 100 beauty schools and vo-techs across the United States. As she expanded internationally, her focus turned to Asia, where she dedicated eight years to implementing artistic training programs and marketing strategies that resulted in the opening of over 100 nail



© Alisha Rimando Botero



salons and seven schools in Japan, growing that market to become the industry leader in nail art techniques.

Over her 19 years of experience, she has been a platform artist and motivational speaker for thousands of promotional and educational events and has competed in over 100 nail competitions around the globe, winning a World Championship in 2005. She has been featured in multiple training videos and in more than 150 beauty and trade publications and blog spots worldwide.

Through the years, Alisha has garnered the attention of large industry manufacturers, small business entrepreneurs, salon franchises, and nail and beauty associations. She has worked with Research and Development 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 new products.

Alisha's current position as Executive Vice President for Artistic Nail Design allows her to continue her passion for product development as well as develop a world-renowned education team and training programs for nail artists across the globe.



© Leslie Roste

Leslie Roste

Chapter 5 Infection Control: Principles and Practices

Chapter 6 Anatomy & Physiology

Chapter 8 Skin Disorders & Diseases

Leslie Roste, RN, BSN, graduated from the University of Kansas,

where she studied Nursing and Microbiology. She worked in various nursing positions including Obstetrical Nursing and Infection Control in the Kansas City area prior to beginning work in the cosmetology industry. Her main focus in the industry has been on health and safety in the professional beauty environment and general education about the sciences involved. She has written many articles for publication such as *Modern Salon* and *NAILS Magazine* and has spoken to audiences large and small on infection control in the work environment, minimum health and safety standards, and safety-based licensure. She is very involved with the industry at all levels, from students to legislators, in making sure that professional beauty industry services are performed safely.

Leslie currently serves on the NACCAS National Career Programs Standardization Committee, The Professional Beauty Coalition for Legislative Education & Reform, and the NIC Education Committee. She also spends a large portion of her time working with individual states on updating and revising rules and/or legislation surrounding Infection Control in the Professional Beauty Industry. She recently wrote and launched a free web-based Infection Control certification that has already certified over 9,000 professionals and students and is being widely used in the schools.

Ronald Williams

Chapter 20 Chemical Texture Services

Ronald Williams (also known as Dr. Ron) is sought after by celebrities, socialites, and prestige hair care companies for his experience and knowledge regarding hair relaxing and aftercare. He is the beauty editors' and bloggers go-to



© Ronald Williams

guy for hair care advice. Dr. Ron travels throughout the United States and Latin America teaching from a science perspective with technical hair design principles. His motto for hair care is simple: "Well cared for hair is the standard for which good hair design and style becomes a reality for all women." He authored technical journals and researched projects about textured and relaxed hair throughout his 30-year career.

Dr. Ron's print media includes, but is not limited to, *Essence*, *Ladies Home Journal*, *People Style Watch*, *Modern Salon*, *People*, *Juicy*, and *Elle*. His online presence is endless and impressive, including his training videos at brand name cosmetics companies.

Dr. Ron holds a doctorate in education, a master's in science, and a bachelor of arts' degree in communication. He is licensed to practice cosmetology in the state of New York.

Contributors for Previous Edition of Milady Standard Cosmetology

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Frank Shipman

Colleen Hennessy

Bonnie Sanford

Dr. Mark Lees

Victoria Wurdinger

Alisha Rimando Botero

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PART *1* ORIENTATION

1 HISTORY & CAREER OPPORTUNITIES

2 LIFE SKILLS

3 YOUR PROFESSIONAL IMAGE

4 COMMUNICATING FOR SUCCESS





1



HISTORY & CAREER OPPORTUNITIES

LEARNING OBJECTIVES

After completing this chapter, you will be able to:

LO 1

Describe appearance enhancement and how it relates to cosmetology.

LO 2

Recognize how trends are influenced by the history of cosmetology.

LO 3

List several career opportunities available to a licensed beauty practitioner.

OUTLINE

WHY STUDY COSMETOLOGY
HISTORY AND CAREER
OPPORTUNITIES? 6

UNDERSTAND THE HISTORY
OF COSMETOLOGY 7

LEARN THE IMPORTANCE
OF CONTINUING EDUCATION 12

DISCOVER THE CAREER PATHS
FOR COSMETOLOGISTS 13

After reading the next few sections, you will be able to:

LO 1 Describe appearance enhancement and how it relates to cosmetology.

A term used to encompass a broad range of specialty areas, including hairstyling, nail technology, and esthetics is **cosmetology** (kahz-muh-TAHL-uh-jee), also described as **appearance enhancement**. Cosmetology is defined as the art and science of beautifying and improving the skin, nails, and hair and includes the study of cosmetics and their application. The term comes from the Greek word *kosmetikos*, meaning skilled in the use of cosmetics. Archaeological studies reveal that haircutting and hairstyling were practiced in some form as early as the Ice Age.

The simple but effective cosmetic implements used at the dawn of history were shaped from sharpened flints, oyster shells, or bone. Animal sinew or strips of hide were used to tie the hair back or as adornment. Ancient people around the world used coloring matter on their hair, skin, and nails, and they practiced tattooing. Pigments were made from berries, tree bark, minerals, insects, nuts, herbs, leaves, and other materials. Many of these colorants are still used today.

why study

COSMETOLOGY HISTORY AND CAREER OPPORTUNITIES?

Cosmetologists should study and have a thorough understanding of the history of cosmetology and the career opportunities available because:

- > Many very old methods have evolved into techniques still used today. Studying the origin of these techniques can be useful in fully understanding how to use them.
- > Knowing the history of your profession can help you predict and understand upcoming trends.
- > Understanding the importance of education will give you clear direction to a successful career.
- > By learning about many possible career paths, you'll see the wide range of opportunities open to cosmetologists.

ACTIVITY

Research how *cosmetology* is defined in your state. For instance, the definition of *cosmetology* as described by the NYS Department of State Division of Licensing Services is as follows:

The practice of "Cosmetology" means providing the services to the hair, head, face, neck, or scalp of a human being, including but not limited to shaving, trimming, and cutting the hair or beard either by hand or mechanical appliances and

the application of antiseptics, powders, oils, clays, lotions or applying tonics to the hair, head, or scalp, and in addition includes providing, for a fee or any consideration or exchange, whether direct or indirect, services for the application of dyes, reactive chemicals, or other preparations to alter the color or to straighten, curl, or alter the structure of the hair of a human being!

After reading the next few sections, you will be able to:

LO2 Recognize how trends are influenced by the history of cosmetology.

Understand the History of Cosmetology

The Africans

African civilization had a variety of hairstyles and they were used as a symbol of tribal traditions and conveyed a message of age, marital status, power, and rank. Many tribes colored the hair with red earth, and wore elaborate hairstyles and head dressing as a symbol of stature (figure 1-1).

In Central and West Africa hairstyles told the story of their status in their respective communities from Kuba of the Democratic Republic of the Congo, the Chokwe of Angola and Zambia, and the Bangwa and Kom chiefdoms of the Cameroon grassfields.

In Southwest African societies, teenage girls and boys underwent initiation rites as part of the journey to adulthood. The young Mbalantu women of Namibia have some of the most intricate hair designs that identified their pre- and post-induction status to the rest of the community. It has been clear from the earliest images of African people that their hair was a preeminent reflection of the state of their well-being and existence in the world. Adorning the head with elaborate hairstyles was and still is considered a sacred place in the African aesthetic.ⁱⁱ



figure 1-1
Africans created grooming aids from materials found in their natural environment.

The Egyptians

Concurrently, in North Africa the Egyptians were the first to cultivate beauty in an extravagant fashion. They used cosmetics as part of their personal beautification habits, religious ceremonies, and preparation of the deceased for burial.

As early as 2630 BC, Egyptians used minerals, insects, and berries to create makeup for their eyes, lips, and skin. Henna was used to stain their hair and nails a rich, warm red. They were also the first civilization to infuse essential oils from the leaves, bark, and blossoms of plants for use as perfumes and for purification purposes. Queen Nefertiti (circa 1400 BC) stained her nails red by dipping her fingertips in henna, wore lavish makeup designs, and used custom-blended essential oils as signature scents. Queen Cleopatra (circa 50 BC) took this dedication to beauty to an entirely new level by erecting a personal cosmetics factory next to the Dead Sea (figure 1-2).

Ancient Egyptians are also credited with creating kohl makeup—originally made from a mixture of ground galena (a black mineral), sulfur, and animal fat—to heavily line the eyes, alleviate eye inflammation, and protect the eyes from the glare of the sun.

In both ancient Egypt and Rome, military commanders stained their nails and lips in matching colors before important battles.



figure 1-2
The Egyptians wore elaborate hairstyles and cosmetics.



figure 1-3
The Greeks advanced grooming and skin care.



figure 1-4
The Romans applied various preparations to the skin.



figure 1-5
The Middle Ages show towering headdresses, intricate hairstyles, and the use of cosmetics on skin and hair.

DID YOU KNOW?
Men's Grooming in Ancient Times

Are you surprised that men's grooming and styling played an integral role in history? In almost every early culture, hairstyles indicated social status. Here are a few examples to consider:

- Noblemen of ancient Gaul (Western Europe during the Iron Age) indicated their rank by wearing their hair long.
- In ancient Greece, boys would cut their hair upon reaching adolescence, while their Hindu counterparts would shave their heads.
- The ancient Britons (Celtic people) were extremely proud of their long hair. Blond hair was brightened with washes composed of tallow, lime, and the extracts of certain vegetables. Darker hair was treated with dyes extracted and processed from plants, trees, and various soils.
- The Danes, Angles, and Normans even dressed their hair for beautification, adornment, and ornamentation before battles with the Britons.

The Chinese

History also shows that during the Shang Dynasty (circa 1600 BC), Chinese aristocrats rubbed a tinted mixture of gum arabic, gelatin, beeswax, and egg whites onto their nails to color them crimson or ebony. Throughout the Zhou Dynasty, also known as Chou Dynasty (circa 1100 BC), gold and silver were the royal colors. During this early period in Chinese history, nail tinting was so closely tied to social status that commoners caught wearing a royal nail color faced a punishment of death.

The Greeks

During the Golden Age of Greece (circa 500 BC), hairstyling became a highly developed art. The ancient Greeks made lavish use of perfumes and cosmetics in their religious rites, in grooming, and for medicinal purposes. They built elaborate baths and developed excellent methods of dressing the hair and caring for the skin and nails. Greek women applied preparations of white lead onto their faces, kohl around their eyes, and vermilion upon their cheeks and lips. Vermilion is a brilliant red pigment, made by grinding cinnabar (a mineral that is the chief source of mercury) to a fine powder. It was mixed with ointment or dusted on the skin in the same way cosmetics are applied today (figure 1-3).

The Romans

Roman women lavishly used fragrances and cosmetics. Facials made of milk and bread or fine wine were popular. Other facials were made of corn with flour and milk, or from flour and fresh butter. A mixture of chalk and white lead was used as a facial cosmetic. Women used hair color to indicate their class in society. Noblewomen tinted their hair red, middle-class women colored their hair blond, and poor women dyed their hair black (figure 1-4).

The Middle Ages

The Middle Ages is the period of European history between classical antiquity and the Renaissance, beginning with the downfall of Rome,

circa AD 476, and lasting until about 1450. Beauty culture is evidenced by tapestries, sculptures, and other artifacts from this period. All of these show towering headdresses, intricate hairstyles, and the use of cosmetics on skin and hair (figure 1-5). Women wore colored makeup on their cheeks and lips, but not on their eyes. Around AD 1000, a Persian physician and alchemist named Avicenna refined the process of steam distillation. This ushered in the modern era of steam-distilled essential oils that we use today.

The Renaissance

This is the period in history during which Western civilization made the transition from medieval to modern history. Paintings and written records tell us a great deal about the grooming practices of the time. One of the most unusual practices was the shaving of the eyebrows and the hairline to show a greater expanse of forehead. A brow-less forehead was thought to give women a look of greater intelligence. During this period, both men and women took great pride in their physical appearance and wore elaborate, elegant clothing. Fragrances and cosmetics were used, although highly colored preparations of the lips, cheeks, and eyes were discouraged (figure 1-6).

The Victorian Age

The reign of Queen Victoria of England, between 1837 and 1901, was known as the Victorian age. Fashions in dress and personal grooming were drastically influenced by the social mores of this austere and restrictive period in history. To preserve the health and beauty of the skin, women used beauty masks and packs made from honey, eggs, milk, oatmeal, fruits, vegetables, and other natural ingredients. Victorian women are said to have pinched their cheeks and bitten their lips to induce natural color rather than use cosmetics, such as rouge or lip color (figure 1-7).

The Twentieth Century

In the early twentieth century, the invention of motion pictures coincided with an abrupt shift in American attitudes. As viewers saw pictures of celebrities with flawless complexions, beautiful hairstyles, and manicured nails, standards of feminine beauty began to change. This era also signaled the spread of industrialization, which brought a new prosperity to the United States. Beauty applications began to follow the trends set by celebrities and society figures (figure 1-8).

1901–1910

In 1904, Max Faktor emigrated from Lodz, Poland, to the United States. By 1908, he had Americanized his name to Max Factor and moved to Los Angeles, where he began making and selling makeup. His makeup was popular with movie stars because it wouldn't cake or crack, even under hot studio lights.

On October 8, 1906, Charles Nessler invented a heavily wired machine that supplied electrical current to metal rods around which hair strands were wrapped. These heavy units were heated during the waving process. They were kept away from the scalp by a complex system of counterbalancing weights that were suspended from an overhead chandelier mounted on a

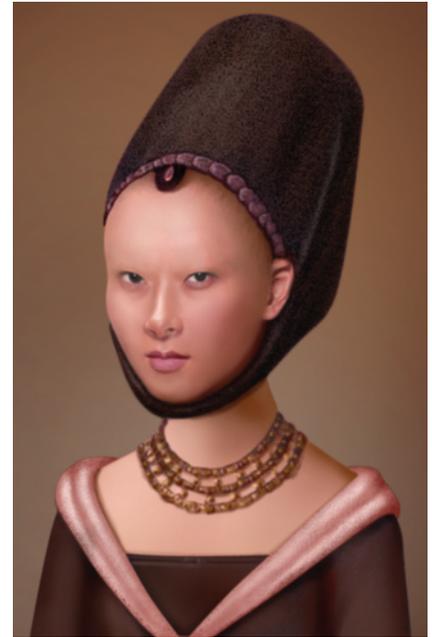


figure 1-6
During the Renaissance, shaving or tweezing of the eyebrows and hairline to show a greater expanse of the forehead was thought to make women appear more intelligent.



figure 1-7
During the Victorian age, makeup and showy clothing were discouraged except in the theater.