



Colorado CTE Course – Scope and Sequence

Course Name	Nail Technology I		Course Details	Credit = 1.0 (Each course in this pathway is recommended at 150 contact hours to meet the licensure requirements for DORA) Prerequisite: none CTE Credential: CTE Personal Care Services	
			Course = 0.50 Carnegie Unit Credit		
Course Description	The first level of the nail technology program introduces the students to the skills required to become a licensed Nail Technician. Courses of study include: introduction to careers in the beauty industry, introductory manicures and pedicures; intro and intermediate disinfection, sanitation and safety procedures. Student that complete all levels of the Nail Technician Program will be eligible for the Colorado Board for Barber and Cosmetology State licensure exam for Nail Technicians.				
Note:	This is a suggested scope and sequence for the course content. The content will work with any textbook or instructional resource. If locally adapted, make sure all essential knowledge and skills are covered.				
SCED Identification #	19105	Schedule calculation based on 60 calendar days of a 90-day semester. Scope and sequence allows for additional time for guest speakers, student presentations, field trips, remediation, or other content topics.			
All courses taught in an approved CTE program must include Essential Skills embedded into the course content. The Essential Skills Framework for this course can be found at https://www.cde.state.co.us/standardsandinstruction/essentialskills					
Instructional Unit Topic	Suggested Length of Instruction	CTE or Academic Standard Alignment	Competency / Performance Indicator	Outcome / Measurement	CTSO Integration
Overview of Cosmetology and the Beauty Industry		Understand historical context and significant milestones in the application of cosmetology and beauty trends as they apply to nail care. Investigate the various equipment, supplies, products, and distributors, and manufacturers, and	Understand significant historical periods in beauty and fashion and their impact on the cosmetology profession and the emergence of new cosmetology trends and techniques in esthetics. Student is expected to:	Synthesize research of historical and significant milestones that influenced cosmetology changes from the beginning of civilization to the present. Create an annotated timeline or visual graphic illustrating significant time periods and major impacts of the cosmetology/nail trends on	

		that represent the beauty industry. Describe importance of keeping up with new trends, technologies, product development, new equipment, and services for clients.	(A) Identify major milestones and contributors to the beauty industry; (B) Discuss historical time periods and their influence on modern beauty trends; (C) Explain the benefits of keeping up with the trends, technologies and new products for treatment plans; and (D) Review new trends, technologies, product development, equipment, and services with a benefit/cost analysis perspective.	the progression of various styles. Use academic research and news media citing specific textual evidence from research. Research and summarize in a clear and coherent informational artifact (e.g., a brochure, poster, fact sheet, narrative, or presentation) the major influential individuals (historical and current professionals) of the professional beauty industry and their contributions to the cosmetology industry. Include the artists' names, major contributions, and examples of their works. Examples of significant contributors include, but not limited to: - Max Factor - Dr. Sitts - Anna Kindred - Charles and Joseph Revson and Charles Lachman Identify and compare ancient methods that have evolved into techniques being used today. Indicate and compare distinguishing features of nail or beauty care used in	
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				ancient times to features found today. Compare and contrast the dramatic changes in nail styles and treatments. Develop claim(s) and counterclaim(s) giving reasoning behind the changes while supplying data and text-based evidence. Articulate why a knowledge of history in cosmetology can help predict upcoming trends. Research various credible sources and summarize the intended result of a prediction in an explanatory essay, informational artifact, or presentation.	
Career Development		Develop an education and career plan aligned with personal goals. Integrate multiple sources of career information from diverse formats to make informed career decisions, solve problems, and manage personal career plans.	Explore and engage in career development activities. Student is expected to: (A) investigate employment opportunities, including entrepreneurship and salon ownership/management;(B) evaluate data or outcome of a broad range of personal care services; and (C) understand career pathways and training and licensing requirements for	Compile and analyze career pathways and the potential of income within the cosmetology program of study locally, state-wide, and nationally. Use supporting evidence from multiple sources, such as local job postings and Colorado Department of Labor and Workforce Development data, to describe the education requirements, job availability, salaries, and	Student ICAP

			cosmetology professionals in Colorado.	benefits. Outline an educational pathway to obtain the necessary level of education and relevant certifications for a chosen occupation in the cosmetology industry, review and revise throughout the program of study. Careers may include the following, but are not limited to: a. Salon Nail Tech b. Salon Owner/Manager c. Skin Care Specialist d. Cosmetology Instructor e. State Board Examiner f. Photo/Movie/Theatre Stylist g. Cosmetic Sales Representative h. Cosmetic Research Chemist Describe personal characteristics and aptitudes, including 21st century skills, needed by nail technicians. Create a rubric for self-assessing 21st century skills and use it to evaluate course assignments and personal work. Examples include the ability to:	
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				a. Communicate verbally and nonverbally in a respectful manner with clients and coworkers b. Work effectively in teams and resolve conflicts when necessary c. Demonstrate a positive work ethic d. Understand different cultures and impact on design and hairstyles e. Adapt to changes f. Manage time and resources wisely Research professional organizations and student organizations in cosmetology. Select one of each and cite specific textual evidence from the organization and news articles to summarize into an essay. Include the following: a. The mission of the organization b. Benefits of belonging to the organization c. Credentials provided and how they are obtained and maintained d. Journals, newsletters, reports, and other documents it publishes	
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				e. Educational opportunities provided f. Competitive opportunities provided g. Conferences held h. Membership costs, levels, student memberships i. Website, contact information Compile information from the cosmetology career exploration from standards to create a written or electronic career pathway plan outlining academic and career achievement goals and objectives, as well as a timeline for ongoing reflection throughout the program of study coursework. Drawing upon personal reflection of cosmetology theoretical knowledge, practical skills, and current styles, write a <i>philosophy of design</i>. Discuss how to put personal beliefs into practice by including concrete examples of your anticipated career pathway.	
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Safety, Sanitation, and Efficient Work Practices (These standards may be embedded into the individual practice areas or covered as a stand-alone unit)		Understand and apply safety, sanitation, and efficient work practices for cosmetology professionals. Demonstrate health and safety procedures, regulations, and personal health practices and determine the meaning of symbols, key terms, and domain-specific words and phrases as related to the Beauty Industry workplace environment. Use health and safety practices for storing, cleaning, and maintaining tools, equipment, and supplies.	Careers in barbering and cosmetology include all aspects of sterilization and sanitation procedures and personal care services, including hair care, nail care, and skin care. Students will be expected to develop an understanding of the technical knowledge and skills needed for success in the personal care services industry including: (A) demonstrate the development of procedures of a safe and healthy work environment; (B) demonstrate safe handling and use of disinfectant products and tools; (C) explain and/ or demonstrate providing all services in a safe environment, taking measures to prevent the spread of infections and contagious disease; (D) list the various types and classifications of bacteria; (E) describe how bacteria grow and reproduce;	Identify personal and jobsite safety hazards and demonstrate practices for safe and healthy work environments. Accurately read, interpret, and demonstrate adherence to safety rules, including but not limited to rules pertaining to Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) guidelines, and state and national code requirements. Be able to distinguish between rules and explain why certain rules apply. Define and differentiate possible emergencies and emergency procedures. Create a disaster and/or emergency response plan including real-life examples describing principles and practices of infection control and blood-borne pathogens as it applies to EPA, OSHA and Safety Data Sheets (SDS). Identify decontamination procedures to ensure the safety of the client and/or peers in the classroom and	
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			(F) describe the relationship of bacteria to the spread of disease; (G) define common diseases and disorders encountered by cosmetology professionals and provide brief overview of their pathology; (H) explain and understand the importance of decontamination; and (I) explain the difference between sanitation, disinfection, and sterilization.	laboratory. Apply work-emergency teamwork procedures and social skills in following the rules for professional ethics and demonstrate a cultural awareness of hygiene and socialized differences by using active listening skills. Demonstrate proper set-up and operation of equipment and utilization of materials by mixing chemicals in appropriate proportions according to manufacturer's instructions. Clean and maintain implements by using appropriately mixed chemicals and following the procedures for decontamination of tools. Identify appropriate chemicals and perform disinfecting procedures. Describe, observe, identify, and analyze the functions, structures, and diseases, and disorders of hair, skin and nails. Demonstrate and communicate to the client the proper care of skin, and nails through cleanliness, nutrition, and healthful	
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				living. Evaluate and demonstrate proper draping, shampooing and conditioning, and rinsing as it applies to safety or diagnosis of clients. Compile, practice, and critique procedures for maintaining a safe and sanitary environment for clients present in a cosmetology facility. Cite information for the Occupational Safety and Health Administration (OSHA) to identify precautionary guidelines to prevent illness, communicable diseases and injuries. Incorporate safety procedures and complete a safety test with 100 percent accuracy; include exam in course portfolio.	
Applied Academic Foundations for Cosmetology		Understand and apply scientific principles of human anatomy, physiology, and chemistry to cosmetology services. Analyze and apply appropriate academic standards required for	The student applies academic skills to the field of cosmetology. The student is expected to: (A) explain the importance of anatomy and physiology to the cosmetology profession;	Outline basic concepts of the human body's anatomy and physiology distinguishing between how a client's skin and nails react to various treatments and services. a. Explain why recognizing the differences between normal and abnormal	

		successful industry sector pathway completion leading to postsecondary education and employment.	(B) identify body tissue, body systems, and their functions; (C) explain the structure, composition, and growth of skin, nails, and hair; (D) apply the principles of organic and inorganic chemistry related to nail care services and products; (E) classify solutions, suspensions, and emulsions that may be used during cosmetology services; (F) apply an understanding of pH and the pH scale to cosmetology services; (G) explain the principles and practices of infection control, including bacterial disorders and diseases and viruses; and (H) explore the nature of electricity by defining types of electric current and the electric modalities used in cosmetology.	anatomy is important in determining whether specific treatments and services are appropriate. b. Examine and differentiate bone and muscle structures that will help you use the proper application of services and products. Create an informational artifact (e.g., brochure, poster, fact sheet, narrative, or presentation) illustrating why anatomy and physiology is important to the cosmetology profession. Apply concepts related to the basics of chemistry to demonstrate the following: a. Examine the roles of organic and inorganic chemistry, different states of matter, oxidation-reduction reactions, and pure substances and physical mixtures as it relates to nail services. b. Explain the differences among solutions, suspensions, and emulsions. c. Evaluate the pH scale and the effects it has on skin and nails.	
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				Research and write an informative essay to distinguish the nature of electricity and electric currents, including explanations on the following that should include but are not limited to: - Principles of electrical equipment and safety - Differences in electromagnetic spectrum, visible spectrum of light, and invisible light - Describe how UV gel works.	
Personal and Employability Skills for Client Services		Demonstrate effective oral and written communication skills with diverse individuals, including coworkers, management, and customers. Understand and apply knowledge of business and employability skills required of cosmetology professionals. Acquire and accurately use beauty industry	The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to: (A) demonstrate professionalism in how to dress appropriately, speak politely, and conduct oneself in a manner appropriate for the profession and work site; (B) employ the ability to be trustworthy by complying	SkillsUSA Career Essentials may be used as an assessment for these standards. Students may also be creating professional portfolios that may include: - Career Pathway Plan - Professionalism Rubric - Professional Organization Essay - Philosophy of Design	SkillsUSA Leadership Contests SkillsUSA 4 Pillars SkillsUSA Career Essentials

		terminology and protocols at the career and college readiness level for communicating effectively in oral, written, and multimedia formats.	with an ethical course of action; (C) use conflict-management skills to avoid potential or perceived conflict; (D) demonstrate effective oral and written communication skills with diverse individuals, including coworkers, management, and customers; (E) develop skill in handling multiple tasks simultaneously such as prioritizing tasks, managing workflow under pressure, and completing work-related activities in a timely manner; (F) exercise personal ownership over the quantity and quality of individual performance and team assignment; and (G) employ leadership skills within a classroom or community setting to maintain positive relationships.	• Professional Development Agencies Artifact • Disaster/Emergency Response Plan • Safety Exam • Hair, Skin, and Nails Artifact • Nail Anatomy Illustration • Graphics of Demonstrations	
Client Services		Demonstrate knowledge of practical cosmetology industry skills for nail	The student demonstrates an understanding in the use of tools, equipment, technologies, and materials	Analyze and define the different aspects of nail anatomy. Generate a visual representation (e.g.,	SkillsUSA Contests: Nail Care

		technicians such as manicuring and pedicuring. Understand and apply tools and techniques for basic cosmetology nail-related services.	used in cosmetology. The student is expected to: (A) employ safe and effective use of tools to enhance client services; (B) use ergonomically designed equipment to promote professional efficiency; (C) use available technology sources effective in a professional salon setting; and (D) apply universal precautions in disposal of hazardous materials. The student applies the academic knowledge and practical skills to simulated and actual work situations. The student is expected to: (A) apply client consultation skills to guide individuals in recognizing concerns and making informed decisions; (B) document client satisfaction, procedures, and products to facilitate ease of consultation in future appointments; (C) locate and compare vendors to maximize benefits for personal care	presentation, poster, brochure, etc.) to illustrate the importance of recognition of the following: - Structure - Growth - Common and uncommon disorders - Infectious and noninfectious nail diseases Perform a hand, nail, and skin analysis for a client. Assess and employ the use of sanitary and safety precautions necessary for procedures including proper decontamination and infection control procedures. Organize, use, and care for implements, equipment, and materials used in the manicure and pedicure procedures. Demonstrate proper use of implements and equipment for manicure and pedicure procedures.	
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			clients, businesses, or organizations; (D) list process steps of basic manicure and pedicure; (E) perform basic manicure as required for the state practical exam; and (F) perform an acrylic nail application service as required for the state practical exam.		
Laws, Rules, and Regulations (This section may be taught in any of the courses in the pathway sequence.)		Understand the laws, rules, and regulations established by Colorado State Statute and the Colorado Department of Regulatory Agencies pertaining to cosmetology professions. Practice professional, ethical, and legal behavior, responding thoughtfully to diverse perspectives and resolving contradictions when possible, consistent with applicable laws, regulations, and organizational norms.	The student demonstrates knowledge of rules and regulations established by the Colorado Department of Regulatory Agencies (DORA) Office of Barber and Cosmetology. The student is expected to: (A) apply health and safety policies and procedures; (B) recognize risks and potentially hazardous situations in compliance with the state rules and regulations; (C) comply with all applicable rules, laws, and regulations; (D) navigate the DORA website for exam eligibility, exam procedures, and other information related to licensing;	Research and summarize in a clear and coherent narrative the legislative and electoral processes of state governments as it relates to cosmetology actions using public documents, textbooks, or government websites. Identify your role as well as the role of public agencies in supporting elected officials to meet goals and objectives, and in endorsing approved legislation or participating in the public rule-making process. Gather research and analyze information from the Colorado Department of Regulatory Agencies (DORA) Office of Barber and Cosmetology Licensure.	

			(E) identify licensure and renewal requirements of the licensee or licensed cosmetology establishment or school; and (F) explain the importance of personal integrity, confidentiality, and ethical behavior in the workplace.	Generate a visual representation (e.g., chart, diagram, brochure, etc.) to illustrate important connections to the following: a. Sanitation, disinfection, and safety laws: cleaning and disinfecting of implements and equipment, cleaning and disinfecting work environment, and sanitary procedures and pathogens b. Licensing, certification, and industry credentialing requirements c. Legal responsibilities, behaviors, and practices/procedures (ethical vs. unethical, legal vs. illegal) Assemble a list of professional and governing organizations that provide professional development for cosmetologists in Colorado. In a written narrative, describe the benefits of ongoing professional development including the state requirements in Colorado for cosmetology and barbering professions.	



Academic Standards Alignment

Colorado CTE courses are required to integrate academic and essential skills into course content. The following academic standards have been identified as aligned to this course and should be integrated throughout instruction.

[CO CTE Academic Standards Resources](#) (Rubrics, integration strategies, etc) [CDE Colorado Academic Standards Online](#) (Online standards lookup tool)

Reading, Writing, & Communicating

Standard 1: Oral Expression and Listening

- **Prepared Graduate 1:** Collaborate effectively as group members or leaders who listen actively and respectfully; pose thoughtful questions, acknowledge the ideas of others; and contribute ideas to further the group's attainment of an objective.
- **Prepared Graduate 2:** Deliver effective oral presentations for varied audiences and varied purposes.

Standard 2: Reading for All Purposes

- **Prepared Graduate 4:** Read a wide range of informational texts to build knowledge and to better understand the human experience.
- **Prepared Graduate 5:** Understand how language functions in different contexts, command a variety of word-learning strategies to assist comprehension, and make effective choices for meaning or style when writing and speaking.

Standard 3: Writing and Composition

- **Prepared Graduate 8:** Craft narratives using techniques specific to the genre.
- **Prepared Graduate 9:** Demonstrate mastery of their own writing process with clear, coherent, and error-free polished products.

Standard 4: Research Inquiry and Design

- **Prepared Graduate 10:** Gather information from a variety of sources; analyze and evaluate its quality and relevance; and use it ethically to answer complex questions.

Note: Mathematics and Science standards will be added in the future. Visit the [Colorado Academic Standards](#) page for the most current version.