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Healthcare Science- Personal Care Services
Pathway Overview

The Personal Care Services Pathway offers several options for students, from three core courses, covering the foundation of cosmetology to the completion of 1500 hours required by the Georgia State Board of Cosmetology for licensure. The following three core courses will be offered for program completion:

1. Cosmetology Services -Core I
2. Cosmetology Services -Core II
3. Cosmetology Services -Core III

Listed below are courses offered to fulfill the 1500 hours required by the Georgia State Board of Cosmetology for licensure:

1. Cosmetology Services - Core IV
2. Advanced Cosmetology Services
3. Internship I, II, III, IV, V
4. Licensure and Employment Opportunities

Below are additional courses offered for advanced studies:

1. Science of Advanced Skincare
2. Science and Art of Makeup
3. Science of Cosmetology

Articulation

The Georgia Department of Education and the Technical College System of Georgia has approved the following courses to be articulated, provided the student completes each course with a required grade average set by the technical colleges.

High School Courses

1. Cosmetology Services Core I
2. Cosmetology Services Core II
3. Cosmetology Services Core III
4. Cosmetology Services Core IV
5. Cosmetology Internships I, II, III, IV& V
6. Licensure and Employment Opportunities

TCSG Courses

- Cosmetology 100, 101, 103
- Cosmetology 105,106, 107
- Cosmetology 108, 109
- Cosmetology 110, 111, 112
- Cosmetology 113, 114, 115, 116
- Cosmetology 117

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PROGRAM CONCENTRATION:
CAREER PATHWAY:
COURSE TITLE:

Healthcare Science
Personal Care Services
Cosmetology Services--Core I

Course Description: This course introduces the fundamental theory and practices of the cosmetology profession. Emphasis will be placed on professional practices and safety. Topics include: state and local laws, rules and regulations, professional image, bacteriology, decontamination and infection control, chemistry fundamentals, safety, Hazardous Duty standards Act compliance, and various types of equipment. This course introduces the chemistry and chemical reaction of permanent wave solutions and relaxers. Topics include: permanent wave techniques, chemical relaxer techniques, chemistry, physical and chemical charge, safety procedures, and permanent wave and chemical relaxer application procedures on mannequins. Included is an introduction to theory, procedures, and products used in the care and treatment of the skin, scalp and hair. Students will demonstrate knowledge and skills in basic corrective hair and scalp treatments, plain facials, products and supplies, diseases and disorders, and safety precautions. Students will earn credit hours toward the completion of the 1500 credit hours required by Georgia State Board of Cosmetology. In addition, this course offers the possibility of meeting articulation alignment with the technical college standards. This course provides more in-depth competencies for the co-curricular student organization SkillsUSA and presents integral components that should be incorporated throughout instructional strategies developed for the course.

State and Local Laws, Rules and Regulations

Students will analyze the field of Cosmetology and the personal skills needed to become a Cosmetologist, state the number of board members, identify sanitation requirements, and list types of certificates of registration. The student will become familiar with the cosmetology profession, Georgia State Board of Cosmetology requirements, laws, rules and regulations, and introduction to fundamental theory and practices of the cosmetology profession.

HS-CS-I-1. Students will classify the history of Cosmetology and the origins of hairstyling and barbering. Students will demonstrate knowledge of the number of board members, requirement hours, and types of licenses. Career opportunities in Cosmetology will be explored. The students will be able to define sanitation requirements in the salon.

- a. Describe the advancements made in Cosmetology.
- b. Describe the origins of hairstyling and barbering.
- c. Explain the requirements for different types of Cosmetology licenses, hours required, and a breakdown of units of study for the different licenses.
- d. Identify sanitation requirements for the salon and schools.
- e. List the career opportunities available to a licensed beauty practitioner.

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HS-CS-I-2. Students will summarize and define personal and public hygiene, ethics, human relations, and ergonomic principles.

- a. Describe hygiene rules and list rules of cleanliness.
- b. Demonstrate good grooming principles.
- c. Demonstrate an understanding of ergonomic principles and ergonomically correct posture.

Infection Control

Students will demonstrate knowledge of salon infection control and how to reduce the spread of infections and diseases. Infection control will include proper sanitation, decontamination, and sterilization. Safe use of chemicals will be applied in the classroom and clinic.

HS-CS-I-3. Students will evaluate the regulations of infection control: principles, prevention, procedures and precautions. The students will demonstrate understanding of proper sanitation, disinfection and sterilization. Facial implements and machines will be properly disinfected and stored.

- a. Compare and contrast the regulatory agencies responsible for the cosmetology field (include OSHA, MSDS and the EPA).
- b. Distinguish the types and classifications of bacteria, bacterial growth, and reproduction.
- c. Define blood borne pathogens, viruses, and parasites.
- d. Differentiate the different methods of sanitation, decontamination, and sterilization.
- e. Identify the types of disinfectants and the disinfection procedure.
- f. Identify all safety rules used in the cosmetology profession.

HS-CS-I-4. Students will demonstrate safety rules when mixing disinfectants, using electrical equipment, facial implements, and machines.

- a. Select, mix, and store the correct antiseptic, disinfectant, and other decontamination chemicals to use in relation to the task.
- b. Determine the appropriate use of all electrical equipment in order to eliminate accidents and ensure safety for the student.
- c. Demonstrate how to sanitize and disinfect all implements and tools used in facials.
- d. Perform all sanitation, disinfection, and safety requirements essential to facial services.

Academic Standard(s):

SCSh2. Students will use standards safety practices for all classroom laboratory and field investigation.

- a. Follow correct procedures for use of scientific apparatus.
- b. Demonstrates appropriate techniques in all laboratory situation.
- c. Follow correct protocol for identifying and reporting safety problems and violations.

Chemistry in Cosmetology

Students will examine the differences between organic and inorganic chemistry and how it relates

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to Cosmetology. The states of matter, elements, molecules, physical, and chemical properties will be explored. Students will describe how hair is composed and how it alters from physical to chemical changes. The students will demonstrate their understanding of product knowledge and how it affects the hair by use of the pH scale. Emphasis will be placed on proper product selection and recommendations for the clients.

HS-CS-1-5. Students will explain, describe, and list the basic components of chemistry in Cosmetology.

- a. Explain the difference between organic and inorganic chemistry.
- b. Discuss the different forms of matter—elements, compounds, and mixtures.
- c. Explain pH and the pH scale.
- d. Define atom, molecule, solution, and emulsion.
- e. Describe properties of matter related to cosmetology.

HS-CS-I-6. Students will differentiate shampoos and conditioners for a variety of hair types, using the pH scale and demonstrating the technique for shampooing and scalp and hair treatments.

- a. Explain the importance of pH in shampoo selection.
- b. Explain the role of surfactants in shampoo.
- c. Discuss the uses and benefits of various types of shampoos and conditioners.
- d. Perform proper scalp manipulations as part of a shampoo service.
- e. Demonstrate proper shampooing and conditioning procedures.
- f. Demonstrate a basic corrective hair and scalp treatments.
- g. Describe the benefits of scalp manipulations.
- h. Apply all safety precautions for scalp and hair treatment and identify safety precautions to be followed in scalp and hair care.

Academic Standard(s):

SC7. Students will characterize the properties that describe solutions and the nature of acids and bases.

- a. Explain the process of dissolving in terms of solute/solvent interactions.
- b. Compare, contrast and evaluate the nature of acids and bases.

Anatomy and Physiology

Students will explain the importance of anatomy and physiology to the personal care service industry. Understanding anatomy and the role it plays in the industry will help the student develop beneficial facial and makeup skills, massage techniques, hair cutting, and hairstyle techniques. This unit will help the student understand how the human body functions as an integrated whole.

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HS-CS-I-7. Students will demonstrate a working knowledge of anatomy as it relates to massage in facials, manicures, and pedicures. Students will demonstrate knowledge of anatomy as it relates to bone structure and muscle contours in hair cutting, facials, and makeup.

- a. Describe the importance of anatomy and physiology to the cosmetology profession.
- b. Explain cells, their structure, and their reproduction.
- c. Define tissue and name the types of tissues found in the body.
- d. Demonstrate the proper massage procedures in manicures, pedicures, and facial massage.
- e. Discriminate between different facial bone structures and muscle contours as it relates to hair cutting, facial, and make-up.
- f. Compare and contrast the ten main body systems and their basic functions and how they relate to manicures, pedicures, and facials.

Academic Standard(s):

SCSh1. Students will evaluate the importance of curiosity, honesty, openness, and skepticism in science.

- a. Exhibit the above traits in their own scientific activities
- b. Recognize that different explanations often can be given for the same evidence.

SAP1. Students will analyze anatomical structures in relationship to their physiological functions.

- a. Apply correct terminology when explaining the orientation of body parts and regions.
- b. Investigate the interdependence of the various body systems to teach others and to the body as a whole.
- c. Describe how structure and functions are related in terms of cell and tissue types.

SAP2. Students will analyze the interdependence of the integumentary, skeletal and muscular systems as these relate to the protection, support, and movement of the human body.

- a. Relate the structure of the integumentary system to its functional role in protecting the body and maintaining homeostasis.
- b. Explain how the skeletal structures provide support, and protection for tissues and function together with the muscular system to make movements possible.

SHCH- Students will use standard safety practices for all classroom laboratory and workplace investigations.

SAP4e- Examine various conditions that change normal body functions (e.g. tissue refection, allergies, injury, disease and disorders) and how the body responds.

SAP5e- Describe effects of aging on all body systems.

Introduction to Chemical Texturing

Students will compare and contrast the chemistry and chemical reactions of permanent wave

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solutions and relaxers. Topics include: analyze hair and scalp, permanent wave techniques, chemical relaxer techniques, chemistry, physical and chemical change, safety procedures, and permanent wave and chemical relaxer application procedures on mannequins.

HS-CS-I-8. Students will describe the chemical reaction of chemical hair texture services. Students will explain the purpose of a scalp and hair analysis in relation to the chemical service. Students will demonstrate (on a mannequin) sectioning, blocking, and wrapping a permanent wave. Students will perform a chemical relaxer on a mannequin. This procedure enables students to compare the changes in the physical and chemical structure of the hair that takes place during the application of a chemical service.

- a. List the factors of hair analysis for chemical texture service.
- b. Explain the physical and chemical actions that take place during permanent waving.
- c. Demonstrate basic wrapping procedures: straight set, curvature wrap, bricklay wrap, weave wrap, double-rod wrap, and spiral wrap.
- d. Describe the procedure for chemical hair relaxing.
- e. Understand the difference between hydroxide relaxers and thio relaxers.
- f. Define the procedures for cold wave services.

Academic Standard(s):

SC6. Students will understand the effects of motion of atoms and molecules in chemical and physical processes.

- a. Compare and contrast atomic/molecular motion in solids, gases, and plasma.
- b. Collect data and calculate the amount of heat given off or taken in by chemical or physical processes.
- c. Analyze the flow of energy during change of states.

Histology of the Skin, Hair and Scalp

Students will examine basic histology and the effects on the hair and skin. Conditions, disorders, diseases of the scalp and skin will be explored. Students will discriminate between signs of a healthy scalp/ skin and an infection or disease that may require refusal of a service. Anatomy of the skin will be distinguished and the roles of the layers of skin, including their functions. Students will demonstrate proper hair analysis and identify hair growth patterns. Disorders of the hair and scalp will be defined. Various scalp and hair treatments will be analyzed to determine the best application for each client. Students will be introduced in theory and application to the procedure and products used in a basic facial service. Students will comprehend how to provide basic skin care services and complete a basic makeup application.

HS-CS-I-9. Students will identify the basic histology of the hair and skin, their diseases and disorders, and corrective treatments.

- a. Identify and compare the structure of hair.

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- b. Investigate and identify samples of hair textures.
- c. Compare the various natural hair growth patterns on live models.
- d. Identify the scientific terms for head and facial hair and differentiate between them.
- e. Demonstrate hair analysis, using density, porosity, and elasticity as scientific indicators.
- f. Identify and compare the physical and chemical actions that damage the hair structure.
- g. Distinguish between the benefits of various hair conditioning products.
- h. Demonstrate the application of basic conditioning products.
- i. Identify the electrical implements used for hair and scalp treatments.
- j. Demonstrate corrective hair and scalp treatments.
- k. Demonstrate safety and infection control procedures used in hair and scalp treatments
- l. Identify the most common diseases and disorders of the skin and hair and explain their origin.
- m. Differentiate between corrective treatments for conditions that may be treated in a salon and those that must be referred to a physician.

Academic Standard(s):

SCSh 1 Students will evaluate the importance of curiosity, honesty, openness, and skepticism in science.

SCSH5 Students will demonstrate the computation and estimation skills necessary for analyzing data and developing reasonable scientific explanations.

ELA10RC3 (a.) Demonstrates an understanding of contextual vocabulary in various subjects.

SCSh4 Students will use tools and instruments for observing, measuring, and manipulating scientific equipment and materials.

S712 Students will describe the structure and functions of cells, tissues, organs, and organ systems.

HS-CS-II-10. Students will understand the structure and function of the human skin enabling the student to analyze and perform the types of services required for a specific skin condition. During this introductory class, the students will become familiar with the correct method for giving a facial and a makeup application. .

- a. Describe the five basic massage movements used in Cosmetology.
- b. List and identify the products and supplies needed to perform plain facial services.
- c. List the basic cosmetics used on the face and neck.
- d. Give plain facial treatment for normal, dry, and oily skin.
- e. Perform basic day and evening makeup application.
- f. Follow safety precautions for skin and facial treatment and identify safety precautions to be followed in skin care.
- g. Demonstrate knowledge of state and federal regulations to include the handling and

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disposal of hazardous materials according to the MSDS.

Academic Standard(s):

SCSh 1 Students will evaluate the importance of curiosity, honesty, openness, and skepticism in science.

Reading Across the Curriculum

Reading Standard Comment

After the elementary years, students engage in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts, mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific vocabulary, and for students to excel in all subjects, they must learn the specific vocabulary of those subject areas in context.

Beginning with the middle grades years, students begin to self-select reading materials based on personal interests established through classroom learning. Students become curious about science, mathematics, history, and literature as they form contexts for those subjects related to their personal and classroom experiences. As students explore academic areas through reading, they develop favorite subjects and become confident in their verbal discourse about those subjects.

Reading across curriculum content develops both academic and personal interests in students. As students read, they develop both content and contextual vocabulary. They also build good habits for reading, researching, and learning. The Reading Across the Curriculum standard focuses on the academic and personal skills students acquire as they read in all areas of learning.

Students will enhance reading in all curriculum areas by:

- a. Reading in all curriculum areas
 - Read a minimum of 25 grade-level appropriate books per year from a variety of subject disciplines and participate in discussions related to curricular learning in all areas.
 - Read both informational and fictional texts in a variety of genres and modes of discourse.
 - Read technical texts related to various subject areas.
- b. Discussing books
 - Discuss messages and themes from books in all subject areas.
 - Respond to a variety of texts in multiple modes of discourse.

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- Relate messages and themes from one subject area to messages and themes in another area.
 - Evaluate the merit of texts in every subject discipline.
 - Examine author's purpose in writing.
 - Recognize the features of disciplinary texts.
- c. Building vocabulary knowledge
- Demonstrate an understanding of contextual vocabulary in various subjects.
 - Use content vocabulary in writing and speaking.
 - Explore understanding of new words found in subject area texts.
- d. Establishing context
- Explore life experiences related to subject area content.
 - Discuss in both writing and speaking how certain words are subject area related.
 - Determine strategies for finding content and contextual meaning for unknown words.

CTAE Foundation Skills

The Foundation Skills for Career, Technical and Agricultural Education (CTAE) are critical competencies that students pursuing any career pathway should exhibit to be successful. As core standards for all career pathways in all program concentrations, these skills link career, technical and agricultural education to the state's academic performance standards.

The CTAE Foundation Skills are aligned to the foundation of the U. S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by a national advisory group of employers, secondary and postsecondary educators, labor associations, and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy.

CTAE-FS-1 Technical Skills: Learners achieve technical content skills necessary to pursue the full range of careers for all pathways in the program concentration.

CTAE-FS-2 Academic Foundations: Learners achieve state academic standards at or above grade level.

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CTAE-FS-3 Communications: Learners use various communication skills in expressing and interpreting information.

CTAE-FS-4 Problem Solving and Critical Thinking: Learners define and solve problems, and use problem-solving and improvement methods and tools.

CTAE-FS-5 Information Technology Applications: Learners use multiple information technology devices to access, organize, process, transmit, and communicate information.

CTAE-FS-6 Systems: Learners understand a variety of organizational structures and functions.

CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.

CTAE-FS-8 Leadership and Teamwork: Learners apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

CTAE-FS-9 Ethics and Legal Responsibilities: Learners commit to work ethics, behavior, and legal responsibilities in the workplace.

CTAE-FS-10 Career Development: Learners plan and manage academic-career plans and employment relations.

CTAE-FS-11 Entrepreneurship: Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.

PROGRAM CONCENTRATION:
CAREER PATHWAY
COURSE TITLE:

Healthcare Science
Personal Care Services
Cosmetology Services II

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Course Description: This course is designed as an intermediate level course for the Cosmetology Pathway Program of Study. It presents intermediate skills and knowledge related to cosmetology and its scientific and mathematical corollaries. Clinical activities are included in this phase of study. Clinicals for hairstyling include: shaping, pincurls, fingerwaves, roller placement, comb-outs, and haircutting concepts. Students will earn credit hours toward the completion of the 1500 credit hours required by Georgia State Board of Cosmetology. This course provides more in-depth competencies for the co-curricular student organization SkillsUSA and presents integral components that should be incorporated throughout instructional strategies developed for the course. In addition, this course offers the possibility of meeting articulation alignment with the technical college standards.

Safety and Infection Control

Students will employ health and safety preventions in salons and comprehend their importance in performance and regulatory compliance. Students will achieve advanced technical content skills necessary to pursue a full range of careers in this program concentration.

HS-CS-II-1. Students will maintain a safe work environment and prevent accidents by using safety precautions and/or practices including adherence to hazardous labeling requirements and compliance with safety signs, symbols, and labels.

- a. Analyze the role and the responsibilities of the personal care provider (student) in the classroom, laboratory, and various workplace settings in an emergency situation.
- b. Demonstrate preparedness procedures for each emergency situation—fires, electric shock, overloading a circuit, inclement weather, blood spills, and other emergency situations that may occur in the classroom/laboratory or workplace.
- c. Demonstrate all safety procedures when working with chemicals.
- d. Demonstrate all infection control procedures when working in the clinic lab.
- e. Demonstrate proper care and safety when working with models/clients.

HS-CS-II-2. Students will understand and apply infection control guidelines including techniques for sanitation, disinfection, and sterilization.

- a. Describe the importance of infection control in the personal care service industry.
- b. Discriminate between the risk and prevention of contamination in the personal care service.
- c. Demonstrate sanitizing, disinfecting, and sterilization techniques used in the personal care service industry.

Academic Standard(s):

SCSh2 Students will use standard safety practices for all classroom laboratory and field investigations.

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- a. Follow correct procedures for use of scientific apparatus.
- b. Demonstrate appropriate techniques in all laboratory situations.
- c. Follow correct protocol for identifying and reporting safety problems and violations

Hair Styling

Students will examine the fundamental theory and skills needed for basic hairstyling. Students will perform various hairstyling techniques, including shaping, pincurls, ridge waves, skipwaves, finger waves, roller placement, comb-outs, and braiding. Students will study hairstyling theory that includes chemistry of shampoos, shampooing, and draping procedures.

HS-CS-II-3. Students will study the fundamental theory and skills required to shampoo and create various hair styles and shapes. Laboratory training includes 15 hours in theory of shampooing, 20 hours of styling training on mannequins and 25 hours on live models without compensation. Topics will cover various applications including: braiding/intertwining hair, shampoo chemistry, shampoo procedures, styling principles, pincers, roller placement, finger waves, comb-out techniques, skipwaves, ridge curls, and safety precautions. Upon completion of this section, students will perform the following tasks:

- a. Demonstrate proper braiding and intertwining hair techniques.
- b. Explain the basic principles of cosmetic chemistry applied to shampooing.
- c. Identify emulsions and suspensions.
- d. Explain and utilize the pH scale.
- e. Identify types of shampoos and their chemistry and select the appropriate shampoo for the service.
- f. Demonstrate the proper steps in preparing a client for a shampoo.
- g. Demonstrate proper shampooing and rinsing techniques.
- h. Identify styling instruments.
- i. Demonstrate the making of a hair parting.
- j. Demonstrate clockwise and counterclockwise moldings and shapings.
- k. Identify the parts of a pincurl.
- l. Identify stem directions used in roller setting and explain their functions.
- m. Demonstrate roller placement in relation to various bases.
- n. Explain the principles of finger waving.
- o. Demonstrate various finger wave techniques on a mannequin.
- p. Identify types and shapes of hair rollers.
- q. Identify stem directions used in roller setting and explain their functions.
- r. Demonstrate basic roller placement in relation to bases.
- s. Identify the implements used in a comb out.
- t. Demonstrate a proper back combing/brushing and comb out techniques.
- u. Identify skipwaves and skipwaving techniques.

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- v. Demonstrate skipwaving on a mannequin.
- w. Identify ridge curls and ridge curl techniques.
- x. Demonstrate ridge curling on a mannequin.
- y. Identify unsafe conditions that may exist in shampoo and styling procedures and explain how each can be corrected.

Academic Standard(s):

SC7. Students will characterize the properties that describe solutions and the nature of acids and bases.

- a. Explain the process of dissolving in terms of solute/solvent interactions.
- b. Compare, contrast and evaluate the nature of acids and bases.

ELApLSV1- The student participates in student-to-teacher, student-to-student, and group verbal interactions.

SASH 1 Students will evaluate the importance of curiosity, honesty, openness, and skepticism in science

SCSh2 Students will use standard safety practices for all classroom laboratory and field investigations.

Haircutting

Students will further enhance competencies in hair cutting techniques for women and men. The hair cutting unit will include: the natural sciences that guide the student in the analysis of growth patterns and directions, weight, and density. The mathematical sciences will provide the key for calculation of lines, angles, and degrees. Students will demonstrate scissor-over comb with thinning shears and razor over comb. Students will perform with clippers: men's taper cuts, fades, and flat top. Women's haircuts will include a combination of the four basic haircuts: one length, layered, graduated and uniform. Focus will be on safety and infection control procedures at all times. Students will identify the basic principles of haircutting and the implements and tools used in the procedure and demonstrate mastery of four basic cuts as well as additional haircutting techniques.

HS-CS-II-4. Students will implement the use of 0, 45, 90, 135, and 180 degrees angles while performing haircuts. Reference points as well as bone structure will be identified to determine complimentary haircuts. Students will study the fundamental theory and skills required for haircutting to create various hair styles and shapes. Theory training includes a total of 30 hours as well as 40 hours of hands on training. Hair analysis will include: growth patterns, texture, density, weight, and general hair condition. Advanced hair cutting skills such as point cutting, notching, free-hand notching, slithering, slicing, and carving will be introduced. Hair texturizing with thinning shears and razors will be included.

- a. Identify reference points on the head form showing the major planes created by the bone structure and understand their role in hair cutting.

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- b. Interpret a detailed analysis of the planes in the muscular structure and recommend a complimentary hair cut.
- c. Describe and demonstrate the geometric angles, (0, 45, 90, 135, 180 degrees) used in hair cutting with a mannequin.
- d. Explain the proper use of electrical hair clippers while utilizing various guards and trimmers.
- e. Explain the different face shapes and what hairstyles would compliment each one.
- f. Discriminate between the different cutting techniques (point cutting, notching, free-hand notching, slithering, slicing and carving) and determine when each could be used.
- g. Construct the following men's haircuts: tapered, fade, and flat top.
- h. Construct different women's haircuts using the combinations of four basic haircuts (one length, layered, graduated, and uniform).
- i. Construct one haircut for men and one for women using only the razor.
- j. Compose different haircuts using the theory of the celestial axis by creating haircuts with convex and concave curves.
- k. Judge the use of safety and infection control procedures implemented in haircutting.

Academic Standard(s):

MA1G4. Students will understand the properties of circles.

- c. Use the properties of circles to solve problems involving the length of an arc and the area of a sector.

MA1G1. Students will investigate properties of geometric figures in the coordinate plane.

- a. Determine the distance between two points.
- b. Determine the distance between a point and a line.
- c. Determine the midpoint of a segment.

MM2P3. Students will communicate mathematically.

- a. Organize and consolidate their mathematical thinking through communication.
- b. Communicate their mathematical thinking coherently and clearly to peers, teachers, and others.
- c. Analyze and evaluate the mathematical thinking and strategies of others.
- d. Use the language of mathematics to express mathematical ideas precisely.

SCSh2 Students will use standard safety practices for all classroom laboratory and field investigations.

Reading Across the Curriculum

Reading Standard Comment

After the elementary years, students engage in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts,

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mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific vocabulary, and for students to excel in all subjects, they must learn the specific vocabulary of those subject areas in context.

Beginning with the middle grades years, students begin to self-select reading materials based on personal interests established through classroom learning. Students become curious about science, mathematics, history, and literature as they form contexts for those subjects related to their personal and classroom experiences. As students explore academic areas through reading, they develop favorite subjects and become confident in their verbal discourse about those subjects.

Reading across curriculum content develops both academic and personal interests in students. As students read, they develop both content and contextual vocabulary. They also build good habits for reading, researching, and learning. The Reading Across the Curriculum standard focuses on the academic and personal skills students acquire as they read in all areas of learning.

Students will enhance reading in all curriculum areas by:

- c. Reading in all curriculum areas
 - Read a minimum of 25 grade-level appropriate books per year from a variety of subject disciplines and participate in discussions related to curricular learning in all areas.
 - Read both informational and fictional texts in a variety of genres and modes of discourse.
 - Read technical texts related to various subject areas.
- d. Discussing books
 - Discuss messages and themes from books in all subject areas.
 - Respond to a variety of texts in multiple modes of discourse.
 - Relate messages and themes from one subject area to messages and themes in another area.
 - Evaluate the merit of texts in every subject discipline.
 - Examine author's purpose in writing.
 - Recognize the features of disciplinary texts.
- e. Building vocabulary knowledge
 - Demonstrate an understanding of contextual vocabulary in various subjects.
 - Use content vocabulary in writing and speaking.
 - Explore understanding of new words found in subject area texts.
- f. Establishing context

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- Explore life experiences related to subject area content.
- Discuss in both writing and speaking how certain words are subject area related.
- Determine strategies for finding content and contextual meaning for unknown words.

CTAE Foundation Skills

The Foundation Skills for Career, Technical and Agricultural Education (CTAE) are critical competencies that students pursuing any career pathway should exhibit to be successful. As core standards for all career pathways in all program concentrations, these skills link career, technical and agricultural education to the state's academic performance standards.

The CTAE Foundation Skills are aligned to the foundation of the U. S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by a national advisory group of employers, secondary and postsecondary educators, labor associations, and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy.

CTAE-FS-1 Technical Skills: Learners achieve technical content skills necessary to pursue the full range of careers for all pathways in the program concentration.

CTAE-FS-2 Academic Foundations: Learners achieve state academic standards at or above grade level.

CTAE-FS-3 Communications: Learners use various communication skills in expressing and interpreting information.

CTAE-FS-4 Problem Solving and Critical Thinking: Learners define and solve problems, and use problem-solving and improvement methods and tools.

CTAE-FS-5 Information Technology Applications: Learners use multiple information technology devices to access, organize, process, transmit, and communicate information.

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CTAE-FS-6 Systems: Learners understand a variety of organizational structures and functions.

CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.

CTAE-FS-8 Leadership and Teamwork: Learners apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

CTAE-FS-9 Ethics and Legal Responsibilities: Learners commit to work ethics, behavior, and legal responsibilities in the workplace.

CTAE-FS-10 Career Development: Learners plan and manage academic-career plans and employment relations.

CTAE-FS-11 Entrepreneurship: Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.

PROGRAM CONCENTRATION:

CAREER PATHWAY:

COURSE TITLE:

Healthcare Science

Personal Care Services

Cosmetology Services--Core III

Course Description: This course is designed to introduce students to advanced scientific and artistic principles in lash and brow tint, haircolor, permanent waves, and relaxers. The course will provide higher level skills that the students can transfer to post-secondary cosmetology schools. Students are required to meet both national and intrastate professional guidelines as designated by applicable regulatory agencies such as the Occupational Health and Safety Administration (OSHA) and the Georgia Board of Cosmetology. Mastery of these standards through project-based learning, technical skills practice, and leadership development activities of the career and technical student organization, SkillsUSA, will provide students with a competitive edge for either entry into the healthcare personal care services marketplace and/or the post-secondary institution of their choice to continue their education and training. SkillsUSA activities should be incorporated throughout instructional strategies developed for the course. In addition, this course offers the possibility of meeting articulation alignment with the technical college standards. This course is considered broad-based with high impact in the personal care service industry. Students

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will achieve advanced technical content skills necessary to pursue a full range of careers in this program concentration.

Safety and Infection Control

Students will employ health and safety preventions in salons and comprehend their importance in performance and regulatory compliance. Students will achieve advanced technical content skills necessary to pursue a full range of careers in this program concentration.

HS-CS-III-1. Students will maintain a safe work environment and prevent accidents by using safety precautions and/or practices including adherence to hazardous labeling requirements and compliance with safety signs, symbols, and labels.

- a. Analyze the role and the responsibilities of the personal care provider (student) in the classroom, laboratory, and various workplace settings in an emergency situation.
- b. Demonstrate preparedness procedures for each emergency situation—fires, electric shock, overloading a circuit, inclement weather, blood spills, and other emergency situations that may occur in the classroom/laboratory or workplace.
- c. Demonstrate all safety procedures when working with chemicals.
- d. Demonstrate all infection control procedures when working in the clinic lab.
- e. Demonstrate proper care and safety when working with models/clients.

HS-CS-III-2. Students will understand and apply infection control guidelines including techniques for sanitation, disinfection, and sterilization.

- a. Describe the importance of infection control in the personal care service industry.
- b. Discriminate between the risk and prevention of contamination in the personal care service.
- c. Demonstrate sanitizing, disinfecting, and sterilization techniques used in the personal care service industry.

Academic Standard(s):

SCSh2 Students will use standard safety practices for all classroom laboratory and field investigations.

- a. Follow correct procedures for use of scientific apparatus.
- b. Demonstrate appropriate techniques in all laboratory situations.
- c. Follow correct protocol for identifying and reporting safety problems and violations.

Lash and Brow Tints

Students will perform proper lash and brow tints using proper procedures and safety measures. Safety and infection control procedures will be followed.

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HS-CS-III-3. Students will be able to perform lash and brow tinting. Emphasis will be placed on safety and infection control procedures. Practical applications can be simulated or on a model/client.

- a. Demonstrate proper lash tinting, using artificial lashes or a model/client.
- b. Demonstrate proper brow tinting using hair swatches or a model/client.
- c. Perform tinting procedures using safety and infection control procedures.

Haircoloring

Students will interpret the laws of color, level systems, natural levels, tones, hair structure, classifications of hair color, developers, lighteners, and hair color applications. Emphasis will be placed on the chemistry of color and how it relates to formulations. Students will learn color formulations for semi-permanent, demi-permanent, permanent, high-lift blondes, lighteners, gray coverage and color corrections. This course will provide the students with basic and advanced haircolor techniques to include foiling highlights and lowlights, slicing, and balayage. The students will learn color corrections including pre-softening, fillers, and soap caps. Record and release forms will be derived from hair analysis.

HS-CS-III-4. Students will illustrate their understanding of color theory including, law of color, primary, secondary, tertiary, complementary colors, natural levels, and contributing pigment levels by creating different haircolor activities. Predisposition and strand tests will be included in the haircolor services.

- a. Demonstrate safety and infection control procedures when working with all chemical services.
- b. Record client record and release cards to reflect hair analysis and service results.
- c. List the principals of primary, secondary, and tertiary colors.
- d. Explain complementary colors and their use in color formulations.
- e. Explain the level system used in haircoloring.
- f. Demonstrate understanding of underlying pigment and how it affects the outcome of color
- g. Demonstrate a working knowledge of color theory, including the law of color, with either hair swatches, mannequins, or clients.
- h. Demonstrate understanding of complementary colors.
- i. Diagram natural and contributing pigment levels used in haircoloring.
- j. Demonstrate and differentiate between the predisposition test and the strand test

Academic Standard(s):

SCSh4 Students will use tools and instruments for observing, measuring, and manipulating scientific equipment and materials.

- a. Develop and use systematic procedures for recording and organizing information.

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HS-CS-III-5. Students will demonstrate a proper haircolor consultation and color formulations. Students will conduct hair analysis and evaluate the results in order to recommend a professional haircolor service. Students will recommend a professional haircolor using proper color formulations from their analysis.

- a. Demonstrate a proper hair color analysis by evaluating the client's hair texture, density, porosity, and general hair condition.
- b. Determine client's natural hair level, existing hair color, tone, and desired hair color.
- c. Create color formulations for temporary, semi-permanent, and demi-permanent haircolor using proper hair analysis and desired hair color and tone.

Academic Standard(s):

ELA9RC4 The student establishes a context for information acquired by reading across subject areas. The student:

- a. Explores life experiences related to subject area content.

HS-CS-III-6. Students will distinguish between different haircolor developers and levels of lift in haircolor. The chemistry of color and how it relates to formulations as well as the end result. Students will create special effect haircoloring formulations using permanent hair color and high-lift blondes and toning.

- a. Describe hair color developers, stating the difference in each and determine the predicted level or levels of lift in the hair (10, 20, 30 and 40 volume developers).
- b. Explain how the chemistry of color works and affects different types of hair color.
- c. Compute different formulations for permanent hair color and high lift blondes utilizing natural levels, existing levels, and contributing pigment levels.
- d. Create advanced haircolor formulations, using either hair swatches, mannequins, and/or clients.
- e. Predict need of using complementary colors to tone unwanted contributing pigment levels.
- f. Judge hair color results for different formulations and determine if desired haircolor results are achieved.
- g. Devise alternative color formulations for any undesired results.

HS-CS-III-7. Students will create advanced haircolor formulations and applications for lighteners and gray coverage. Application techniques will include foiling, using both high and low lights, caps, slicing and balayage.

- a. Illustrate different haircolors on swatches, mannequins, and/or clients using various techniques for lightening and gray coverage.
- b. Demonstrate foiling techniques using either high or low lights.
- c. Devise different haircolor formulations for gray coverage.
- d. Construct different slicing patterns on a mannequin and/or client by using cholesterol or haircolor.

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- e. Demonstrate the proper techniques for using the cap method for haircoloring.
- f. Demonstrate the proper balayage techniques.

HS-CS-III-8. Students will determine when to use the recommended techniques and formulations for corrective haircolor. Students will examine the importance of pre-softening, fillers, tint removal, tint back, and soap caps, including proper applications.

- a. Discriminate between the different color corrective applications and services and determine when each is recommended.
- b. Demonstrate the proper techniques for pre-softening resistant gray hair.
- c. Describe the advantages of using a color filler for equalizing porosity and unpigmented hair.
- d. Distinguish the difference between tint removal and tint back.
- e. Demonstrate proper application of a soap cap.

Academic Standard(s):

ELABLRC2 The student participates in discussions related to curricular learning in all subject areas. The student:

- a. Identifies messages and themes from books in all subject areas.
- c. Relates messages and themes from one subject area to those in another area.

Intermediate Chemical Texturing

Students will describe the scientific process of the physical and chemical reactions of permanent waves. Students will evaluate the role of hair structure, including amino acids, peptide bonds, end bonds, side bonds, hydrogen, salt bonds, disulfide bonds and determine how these bonds are affected during permanent waving. Students will compare and contrast the difference between acid and alkaline perms including waving lotion, neutralizer, and the role of each. Client consultations will include chemical service history, texture, density, porosity and elasticity and direction of hair growth, and correct perm selection. Students will demonstrate different methods of base control and define their end results. Various perm wrap techniques will be demonstrated, including basic perm wrap, curvature, bricklay, and spiral. Timing of perm applications will be assessed. Precautions and special problems in a permanent waving will be critiqued. Safety precautions for permanent and Hazardous Duty Standards Act compliance will be addressed in this unit.

HH-CS-III-9. Students will evaluate the physical and chemical reactions of permanent waves and how the hair is altered in a permanent wave service.

- a. Synthesize the different chemical bonds that form the polypeptide chains and determine how they are reformed by chemical reactions of a permanent wave.
- b. Justify concerns with weakening the peptide bonds during a chemical service.
- c. Define the following and their role in permanent waving: peptide bonds, end bonds, side bonds, hydrogen, salt, and disulfide bonds.

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- d. Describe how chemicals in the permanent wave process produce a chemical change in the hair structure.

Academic Standard(s):

SC1 Students will analyze the nature of matter and its classifications.

- b. Identify substances based on chemical and physical properties.

SC3 Students will use the modern atomic theory to explain the characteristics of atoms.

- c. Explain the relationship of the proton number to the element's identity.
- e. Compare and contrast types of chemical bonds (i.e., ionic, covalent).

SC5 Students will understand that the rate at which a chemical reaction occurs can be affected by changing concentration, temperature, or pressure and the addition of a catalyst.

- a. Demonstrate the effects of changing concentration, temperature, and pressure on chemical reactions.
- b. Investigate the effects of a catalyst on chemical reactions and apply it to everyday examples.

HS-CS-III-10. Students will compare and contrast the different types of permanent waves, ingredients, process, recommended hair types, advantages and disadvantages of each perm.

- a. Explain the difference between acid and alkaline perms, including the pH., chemical process, advantages, and disadvantages.
- b. Describe the chemical reactions of the waving lotion and the neutralizer.
- c. Compare the chemical reaction of glyceryl monothioglycolate in acid perms and ammonium thioglycolate in alkaline perms, and determine the hair type that works best with each product.
- d. Compare and contrast the difference between exothermic and endothermic waves along with the chemical reaction on the hair.
- e. Evaluate important factors to consider when selecting the correct type of perm for a client.

Academic Standard(s):

SC7 Students will characterize the properties that describe solutions and the nature of acids and bases.

- a. Explain the process of dissolving in terms of solute/solvent interactions:
 - * Observe factors that affect the rate at which a solute dissolves in a specific solvent
- b. Compare, contrast, and evaluate the nature of acids and bases:
 - * Strong vs. weak acids/bases in terms of percent dissociation
 - * pH
 - * Acid-Base neutralization

HS-CS-III-11. Students will be able to demonstrate a professional client consultation for a permanent wave service.

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- a. Perform client consultations for a chemical permanent wave using a Client Record Card.
- b. Evaluate the client's hair condition, including texture, density, porosity, elasticity, hair growth direction and overall general hair condition. Include client chemical history.
- c. Determine correct type of perm according to findings of the client's hair analysis.

Academic Standards (s):

SCSh3 Students will identify and investigate problems scientifically.

- a. Suggest reasonable hypotheses for identified problems.
- b. Develop procedures for solving scientific problems.
- c. Collect, organize and record appropriate data.
- e. Develop reasonable conclusions based on data collected.
- f. Evaluate whether conclusions are reasonable by reviewing the process and checking against other available information.

HS-CS-III-12. Students will be able to discriminate between different perm tools for various perm wraps according to the desired results. Students will compare and contrast perm tools and their results. Various end wraps will be used. Different base controls and how they relate to the final curl results will be emphasized. Students will use all safety and infection control procedures in the clinic/lab.

- a. Differentiate between straight and concave perm tools.
- b. Illustrate the proper use of double, bookend, and cushion wrap.
- c. Demonstrate on-base, half-off base and off-base placement using various perm tools.
- d. Design various perm patterns including basic perm wrap, bricklay, curvature, and spiral.
- e. Record perm wrapping time to show an increase in speed.
- f. Demonstrate safety and infection control when working in the lab/clinic.

Academic Standard(s):

SCSh8 Students will understand important features of the process of scientific inquiry.

Students will apply the following to inquiry learning practices:

- a. Scientific investigators control the conditions of their experiments in order to produce valuable data.
- b. Scientific researchers are expected to critically assess the quality of data including possible sources of bias in their investigation's hypotheses, observations, data analyses, and interpretations.

SCSh2 Students will use standard safety practices for all classroom laboratory and field investigations.

- a. Follow correct procedures when using scientific apparatus.
- b. Demonstrate appropriate techniques in all laboratory situations.
- c. Follow correct protocol for identifying and reporting safety problems and violations.

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HS-CS-III-13. Students will evaluate various perm problems, their causes, and methods of correction.

- a. Evaluate different reasons for over-processed and under-processed hair and methods to avoid.
- b. Describe metallic perms and their importance in identification when perming.
- c. Determine different alternatives in correcting problems in perms.

Chemical Hair Relaxing

Students will perform proper hair relaxers on mannequins or clients. Students will evaluate the role of the hair structure including

Academic Standard(s):

SCSh3 Students will identify and investigate problems scientifically.

- a. Suggest reasonable hypotheses for identified problems.
- b. Develop procedures for solving scientific problems.
- c. Collect, organize, and record appropriate data.
- d. Graphically compare and analyze data points and/or summary statistics.
- e. Develop reasonable conclusions based on data collected.
- f. Evaluate whether conclusions are reasonable by reviewing the process and checking against other available information.

amino acids, peptide bonds, end bonds, side bonds, hydrogen, salt bonds, disulfide bonds and determine how these bonds are affected during hair relaxer services. Emphasis will be placed on chemistry of relaxers, types of relaxers, (including an ammonium thioglycolate and sodium hydroxide), consultation/ hair analysis selection of products, record keeping, properly timed applications, special problems, safety and the Hazardous Duty Standard Act.

HS-CS-III-14. Students will explain the chemistry of hair relaxing and types of relaxers.

- a. Describe the chemistry of hair relaxing and the role of reduction reactions in relaxing.
- b. Explain the chemical and physical change that take place during hair relaxing.
- c. Distinguish between ammonium thioglycolate and sodium hydroxide relaxers.
- d. State the role of the relaxer and neutralizer.
- e. Identify relaxer strengths, including mild, regular, and super.

Academic Standard(s):

SC5 Students will understand that the rate at which a chemical reaction occurs can be affected by changing concentration, temperature, or pressure and the addition of a catalyst.

- a. Demonstrate the effects of changing concentration, temperature, and pressure on chemical reactions.
- b. Investigate the effects of a catalyst on chemical reactions and apply it to everyday examples.

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HS-CS -III-15. Students will be able to perform client consultations for hair relaxer services including hair analysis and correct product selection.

- a. Perform client consultations for hair relaxer service including hair texture, porosity, elasticity, density, direction of hair growth, and general hair condition.
- b. Determine the type of relaxer (thio, hydroxide, etc.) including mild, regular, or super for each client consultation.
- c. Record information from consultation, product selection, and results on client record cards.

HS-CS-III-16. Students will demonstrate timed relaxer applications using mannequins or clients. Applications performed will include virgin relaxer and retouch relaxers. Students will evaluate special problems that could occur while relaxing hair.

- a. Demonstrate timed virgin and retouch relaxers.
- b. Record information from relaxer services on client record card.
- c. Evaluate special problems' area of concern in hair relaxers and assess methods of corrections.

HS-CS-III-17. Students will perform hair relaxer services using proper safety, infection control, and Hazardous Duty Standards Act in all procedures.

- a. Describe safety standards and precautions when performing hair relaxer services.
- b. Perform hair relaxer services using safety procedures and infection control guidelines.

Academic Standard(s):

SCSh2 Students will use standard safety practices for all classroom laboratory and field investigations.

- a. Follow correct procedures for use of scientific apparatus.
- b. Demonstrate appropriate techniques in all laboratory situations.
- c. Follow correct protocol for identifying and reporting safety problems and violations.

Academic Foundations

HS-IHS-1: Students will demonstrate knowledge and understanding of the academic subject matter required for proficiency within their area. Academic Standards are integrated throughout the standard.

Reading Standard Comment

After the elementary years, students engage in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts, mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific vocabulary, and for students to excel in all subjects, they must learn the specific vocabulary of those subject areas in context.

Beginning with the middle grades years, students begin to self-select reading materials based on personal interests established through classroom learning. Students become curious about science, mathematics, history, and literature as they form contexts for those subjects related to their personal and classroom experiences. As students explore academic areas through reading, they develop favorite subjects and become confident in their verbal discourse about those subjects.

Reading across curriculum content develops both academic and personal interests in students. As students read, they develop both content and contextual vocabulary. They also build good habits for reading, researching, and learning. The Reading Across the Curriculum standard focuses on the academic and personal skills students acquire as they read in all areas of learning.

Students will enhance reading in all curriculum areas by:

- e. Reading in all curriculum areas
 - Read a minimum of 25 grade-level appropriate books per year from a variety of subject disciplines and participate in discussions related to curricular learning in all areas.
 - Read both informational and fictional texts in a variety of genres and modes of discourse.
 - Read technical texts related to various subject areas.
- f. Discussing books
 - Discuss messages and themes from books in all subject areas.
 - Respond to a variety of texts in multiple modes of discourse.
 - Relate messages and themes from one subject area to messages and themes in another area.
 - Evaluate the merit of texts in every subject discipline.
 - Examine author's purpose in writing.
 - Recognize the features of disciplinary texts.
- g. Building vocabulary knowledge

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- Demonstrate an understanding of contextual vocabulary in various subjects.
 - Use content vocabulary in writing and speaking.
 - Explore understanding of new words found in subject area texts.
- h. Establishing context
- Explore life experiences related to subject area content.
 - Discuss in both writing and speaking how certain words are subject area related.
 - Determine strategies for finding content and contextual meaning for unknown words.

CTAE Foundation Skills

The Foundation Skills for Career, Technical and Agricultural Education (CTAE) are critical competencies that students pursuing any career pathway should exhibit to be successful. As core standards for all career pathways in all program concentrations, these skills link career, technical and agricultural education to the state's academic performance standards.

The CTAE Foundation Skills are aligned to the foundation of the U. S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by a national advisory group of employers, secondary and postsecondary educators, labor associations, and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy.

CTAE-FS-1 Technical Skills: Learners achieve technical content skills necessary to pursue the full range of careers for all pathways in the program concentration.

CTAE-FS-2 Academic Foundations: Learners achieve state academic standards at or above grade level.

CTAE-FS-3 Communications: Learners use various communication skills in expressing and interpreting information.

CTAE-FS-4 Problem Solving and Critical Thinking: Learners define and solve problems, and use problem-solving and improvement methods and tools.

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CTAE-FS-5 Information Technology Applications: Learners use multiple information technology devices to access, organize, process, transmit, and communicate information.

CTAE-FS-6 Systems: Learners understand a variety of organizational structures and functions.

CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.

CTAE-FS-8 Leadership and Teamwork: Learners apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

CTAE-FS-9 Ethics and Legal Responsibilities: Learners commit to work ethics, behavior, and legal responsibilities in the workplace.

CTAE-FS-10 Career Development: Learners plan and manage academic-career plans and employment relations.

CTAE-FS-11 Entrepreneurship: Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.

PROGRAM CONCENTRATION:

CAREER PATHWAY:

COURSE TITLE:

**Healthcare Science
Personal Care Services--Cosmetology
Cosmetology Services--Core IV**

Course Description: This course is designed to enhance competencies in nail diseases and disorders, manicures, pedicures, hairstyling, wigs, thermal curling and pressing, electricity, salon business, and safety. Units will include how to recognize signs of infections, disorders and diseases and when to decline a service. Focus will be on proper procedures for nail services by using sanitation and infection control guidelines. Hairstyling will include working with wigs and the use of thermal irons. The importance of understanding the basics of electricity and how to use equipment safety in the salon will be emphasized. The Salon Business unit will provide the

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student an opportunity to learn employability skills, marketing, selling, customer relations, business operations, and owning a salon. Students will earn credit hours toward the completion of the 1500 credit hours required by the Georgia State Board of Cosmetology. In addition, this course offers the possibility of meeting articulation alignment with the technical college standards. This course provides more in-depth competencies for the co-curricular student organization SkillsUSA and presents integral components that should be incorporated throughout instructional strategies developed for the course.

Safety and Infection Control

Students will employ health and safety preventions in salons and comprehend their importance in performance and regulatory compliance. Students will achieve advanced technical content skills necessary to pursue a full range of careers in this program concentration.

HS-CS-IV-1. Students will maintain a safe work environment and prevent accidents by using safety precautions and/or practices including adherence to hazardous labeling requirements and compliance with safety signs, symbols, and labels.

- a. Analyze the role and the responsibilities of the personal care provider (student) in the classroom, laboratory, and various workplace settings in an emergency situation.
- b. Demonstrate preparedness procedures for each emergency situation—fires, electric shock, overloading a circuit, inclement weather, blood spills and other emergency situations that may occur in the classroom/laboratory or workplace.
- c. Demonstrate all safety procedures when working with chemicals.
- d. Demonstrate all infection control procedures when working in the clinic lab.
- e. Demonstrate proper care and safety when working with models/clients.

HS-CS-IV-2. Students will understand and apply infection control guidelines including techniques for sanitation, disinfection and sterilization.

- a. Describe the importance of infection control in the personal care service industry.
- b. Discriminate between the risk and prevention of contamination in the personal care service.
- c. Demonstrate sanitizing and disinfecting and sterilization techniques used in the personal care service industry.

Academic Standard(s):

SCSh2 Students will use standard safety practices for all classroom laboratory and field investigations.

- a. Follow correct procedures when using scientific apparatus.
- b. Demonstrate appropriate techniques in all laboratory situations.
- c. Follow correct protocol for identifying and reporting safety problems and violations.

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Skin, Scalp, and Hair

Students will further their knowledge of cosmetology skills and develop the skills needed to perform services on clients in the areas of skin, scalp, hair, hairstyling, and nail care.

HS-CS-IV-3. Students will perform scalp and hair treatments. Students will describe the usage of electrical implements and how they are used in scalp treatments.

- a. Analyze hair and scalp to determine which type of treatment is needed.
- b. Explain the usage of electrical implements used for hair and scalp treatments.
- c. Demonstrate corrective scalp and hair treatments.
- d. Describe the usage of light therapy for corrective treatment.

Academic Standard(s):

SPS7 Students will relate transformations and flow of energy within a system.

HS-CS-IV-4. Students will perform a skin analysis and provide services suitable for the client's individual skin care needs.

- a. Differentiate between a facial for dry skin and a facial for oily skin.
- b. Analyze skin to determine which facial services are needed and proceed with appropriate facial.
- c. Perform facial hair removal services: waxing, tweezing, etc.
- d. Perform an effective skin analysis.
- e. Perform exfoliation techniques using proper products.

Academic Standard(s):

SCSh3 Students will identify and investigate problems scientifically.

- a. Suggest reasonable hypotheses for identified problems
- c. Collect, organize, and record appropriate data.
- e. Develop reasonable conclusions based on data collected.
- f. Evaluate whether conclusions are reasonable by reviewing the process and checking against other available information.

Intermediate Hairstyling

Students will demonstrate a variety of techniques used in thermal hairstyling using thermal tools to create wearable styles. Students will further develop an understanding by building on basic foundation skills covered in previous courses on thermal hairstyling. Students will demonstrate artificial hairstyling techniques. The student will be able to determine which types of services to provide according to the client's own preferences. Safety practices for all electrical equipment will be maintained.

HS-CS-IV-5. Students will develop an understanding on the tools used in thermal hair

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styling and will perform thermal hair curling techniques on clients/mannequins.

- a. Define thermal waving.
- b. Compare and contrast electrical and non-electrical thermal irons.
- c. Describe safety measures used when working with thermal irons.
- d. Label the parts of a thermal iron.
- e. Demonstrate proper procedure for thermal waving.
- f. Demonstrate thermal curling techniques on a variety of hair textures and lengths (short, medium, fine, coarse, etc.)

HS-CS-IV-6. Students will demonstrate the technique of thermal hair pressing, use a pressing comb, and be able to choose soft, medium or hard press to reach the desired style.

- a. Define thermal pressing.
- b. Describe the different types of pressing combs and their structure.
- c. Distinguish between soft, medium, and hard press.

HS-CS-IV-7. Students will be able to perform blow-dry styling techniques to achieve desired style with the proper use of blow-dry styling tools such as brushes, blow-dryer attachments, and styling aids.

- a. Create a hairstyle to accentuate face shape.
- b. Demonstrate the use of a diffuser and concentrator to maximize style.
- c. Demonstrate blow-dry styling using a variety of styling brushes (round, vented, etc.).
- d. Demonstrate blow-dry styling on curly hair.

HS-CS-IV-8. Students will provide hair services including shampoo and styling of different types of artificial hair.

- a. Demonstrate procedure for fitting, cleaning, shaping, and styling all types of human hair and synthetic wigs and hair pieces.

Nail Care Services

Students will strengthen their basic nail care services as well as expand the services to include artificial nail enhancements. Students will identify nail care services that should be performed or referred to a physician. Students will practice safety and sanitation practices for pre- and post-manicuring and pedicuring services.

HS-CS- IV-9. Students will distinguish between nail disorders and irregularities of the nail as well as recognize the need to refer clients to a physician.

- a. Describe a healthy nail.
- b. Identify the diseases of the hands and feet and recognize diseases that should not be treated in the salon.

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Academic Standard(s):

SAP1 Students will analyze anatomical structures in relationship to their physiological functions.

- a. Apply correct terminology when explaining the orientation of body parts and regions.
- e. Describe how structure and function are related in terms of cell and tissue types.

SCSh6 Students will communicate scientific investigations and information clearly.

HS-CS-IV-10. Students will perform nail care services to include manicures and pedicures. (hand, arm, and foot massages)

- a. Prepare a basic manicure table including material, equipment, and supplies used to perform a manicure.
- b. Demonstrate pre-service sanitation and post-service procedure.
- c. Demonstrate manicure services (basic, oil, French, etc.).
- d. Demonstrate hand and arm massage.
- e. Show nail polish application.
- f. Demonstrate basic pedicure services including foot massage and toenail polish application.

HS-CS-IV-11. Students will perform acrylic (methacrylate) nail enhancement services including nail tips, nail forms, and overlays.

- a. Identify the tools, equipment, and supplies used in acrylic nail services.
- b. Demonstrate basic nail tip application with pre and post service procedures.
- c. Explain acrylic (methacrylate) nail enhancements.
- d. Demonstrate acrylic (methacrylate) nail enhancements using nail forms, over tips, and natural nail.

Academic Standard(s):

SPS6 Students will investigate the properties of solutions.

- a. Describe solutions in terms of
* solute/solvent

HS-CS-IV-12. Students will display continuity of salon services they have previously mastered.

- a. Demonstrate application of skills through salon services via client or mannequin (hairstyling, chemical, skin, and nail services, etc.).

Reading Across the Curriculum

Reading Standard Comment

After the elementary years, students engage in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts, mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific vocabulary, and for students to excel in all subjects, they must learn the specific vocabulary of those subject areas in context.

Beginning with the middle grades years, students begin to self-select reading materials based on personal interests established through classroom learning. Students become curious about science, mathematics, history, and literature as they form contexts for those subjects related to their personal and classroom experiences. As students explore academic areas through reading, they develop favorite subjects and become confident in their verbal discourse about those subjects.

Reading across curriculum content develops both academic and personal interests in students. As students read, they develop both content and contextual vocabulary. They also build good habits for reading, researching, and learning. The Reading Across the Curriculum standard focuses on the academic and personal skills students acquire as they read in all areas of learning.

Students will enhance reading in all curriculum areas by:

- g. Reading in all curriculum areas
 - Read a minimum of 25 grade-level appropriate books per year from a variety of subject disciplines and participate in discussions related to curricular learning in all areas.
 - Read both informational and fictional texts in a variety of genres and modes of discourse.
 - Read technical texts related to various subject areas.
- h. Discussing books
 - Discuss messages and themes from books in all subject areas.
 - Respond to a variety of texts in multiple modes of discourse.
 - Relate messages and themes from one subject area to messages and themes in another area.
 - Evaluate the merit of texts in every subject discipline.
 - Examine author's purpose in writing.
 - Recognize the features of disciplinary texts.
- i. Building vocabulary knowledge

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- Demonstrate an understanding of contextual vocabulary in various subjects.
 - Use content vocabulary in writing and speaking.
 - Explore understanding of new words found in subject area texts.
- j. Establishing context
- Explore life experiences related to subject area content.
 - Discuss in both writing and speaking how certain words are subject area related.
 - Determine strategies for finding content and contextual meaning for unknown words.

CTAE Foundation Skills

The Foundation Skills for Career, Technical and Agricultural Education (CTAE) are critical competencies that students pursuing any career pathway should exhibit to be successful. As core standards for all career pathways in all program concentrations, these skills link career, technical and agricultural education to the state's academic performance standards.

The CTAE Foundation Skills are aligned to the foundation of the U. S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by a national advisory group of employers, secondary and postsecondary educators, labor associations, and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy.

CTAE-FS-1 Technical Skills: Learners achieve technical content skills necessary to pursue the full range of careers for all pathways in the program concentration.

CTAE-FS-2 Academic Foundations: Learners achieve state academic standards at or above grade level.

CTAE-FS-3 Communications: Learners use various communication skills in expressing and interpreting information.

CTAE-FS-4 Problem Solving and Critical Thinking: Learners define and solve problems, and use problem-solving and improvement methods and tools.

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CTAE-FS-5 Information Technology Applications: Learners use multiple information technology devices to access, organize, process, transmit, and communicate information.

CTAE-FS-6 Systems: Learners understand a variety of organizational structures and functions.

CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.

CTAE-FS-8 Leadership and Teamwork: Learners apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

CTAE-FS-9 Ethics and Legal Responsibilities: Learners commit to work ethics, behavior, and legal responsibilities in the workplace.

CTAE-FS-10 Career Development: Learners plan and manage academic-career plans and employment relations.

CTAE-FS-11 Entrepreneurship: Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.

PROGRAM CONCENTRATION:

CAREER PATHWAY:

COURSE TITLE:

**Healthcare Science
Personal Care Services--Cosmetology
Advanced Cosmetology Services**

Course Description: This laboratory course is designed to enhance competencies in chemical hair processing techniques on the hair, specifically in permanent waving, chemical relaxing, and hair coloring techniques. Students will earn credit hours toward the completion of the 1500 credit hours required by the Georgia State Board of Cosmetology. This course provides more in-depth competencies for the co-curricular student organization SkillsUSA and presents integral components that should be incorporated throughout instructional strategies developed for the course. In addition, this course offers the possibility of meeting articulation alignment with the technical college standards.

Safety and Infection Control

Implementation date
Fall 2010

Students will employ health and safety preventions in salons and comprehend their importance in performance and regulatory compliance. Students will achieve advanced technical content skills necessary to pursue a full range of careers in this program concentration.

HS-ACS-1. Students will maintain a safe work environment and prevent accidents by using safety precautions and/or practices including adherence to hazardous labeling requirements and compliance with safety signs, symbols, and labels.

- a. Analyze the role and the responsibilities of the personal care provider (student) in the classroom, laboratory, and various workplace settings in an emergency situation.
- b. Demonstrate preparedness procedures for each emergency situation—fires, electric shock, overloading a circuit, inclement weather, blood spills, and other emergency situations that may occur in the classroom/laboratory or workplace.
- c. Demonstrate all safety procedures when working with chemicals.
- d. Demonstrate all infection control procedures when working in the clinic lab.
- e. Demonstrate proper care and safety when working with models/clients.

HS-ACS-2. Students will understand and apply infection control guidelines including techniques for sanitation, disinfection, and sterilization.

- a. Describe the importance of infection control in the personal care service industry.
- b. Discriminate between the risk and prevention of contamination in the personal care service.
- c. Demonstrate sanitizing, disinfecting, and sterilization techniques used in the personal care service industry.

Academic Standard(s):

SCSh2 Students will use standard safety practices for all classroom laboratory and field investigations.

- a. Follow correct procedures for use of scientific apparatus.
- b. Demonstrate appropriate techniques in all laboratory situations.
- c. Follow correct protocol for identifying and reporting safety problems and violations

Advanced Nail Techniques

Students will provide advanced nail services. Consulting with clients to determine their needs and preferences will be presented. Students will use a variety of salon products while performing client services and while conducting services in a safe environment. Measures will be implemented to prevent the spread of infectious and contagious diseases.

HS-ACS-3. Students will demonstrate the pre-service and post-service steps for artificial nail applications.

- a. Prepare a table for artificial nail services using decontamination procedures.

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- b. Demonstrate proper handling of equipment, supplies, and chemicals for artificial nail services.
- c. Discuss options with clients about the variety of nail services available.
- d. Discuss safety and home maintenance care of artificial nails.
- e. Demonstrate correct disposal of waste contaminated with blood-borne pathogens and proper clean-up procedures.

Academic Standard(s):

SCSh2. Students will use standard safety practices for all classroom laboratory and field investigations.

- a. Follow correct procedures for use of scientific apparatus.
- b. Demonstrate appropriate techniques in all laboratory situations.
- c. Follow correct protocol for identifying and reporting safety problems and violations.

HS-ACS-4. Students will be able to demonstrate procedures for sculpture nails, tips with acrylic overlay, fabric wraps, gel nails, and dipped nails.

- a. Perform client consultation and complete client record card.
- b. Create sculpture nails over natural nails.
- c. Apply different types of tips (full-well, half-well, clear, and white) for acrylic overlays, fabric wraps, gel nails, and dipped nails.
- d. Demonstrate the use of different types of fabric wraps (fiber glass, linen, paper, and silk).
- e. Distinguish between light cured and no-light cured gels.
- f. Explain the procedure for dipped nails.
- g. Follow all safety precautions for artificial nail removal.

HS-ACS-5. Students will create wearable and competitive nail art using a variety of techniques.

- a. Use three-stroke method for nail polish application.
- b. Create flat art designs using freehand applications.
- c. Distinguish Gems, stones, taping, and striping applications.
- d. Demonstrate proper removal of art work.

Chemical Texturing Services

Students will give a permanent wave on all types and lengths of hair. Students will perform wave formation techniques in accordance with the manufacturers' directions.

HS-ACS-6. Students will consult with clients to determine their needs and preferences.

- a. Communicate the needs of the client by making appropriate adjustments in language use in work situations demonstrating sensitivity to gender and cultural bias.
- b. Communicate an understanding of factors that influence the determination of strategies necessary to meet individual client needs.

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Academic Standard(s):

ELA9LSV1: The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

- a. Initiates new topics and responds to adult-initiated topics.
- b. Asks relevant questions.
- c. Responds to questions with appropriate information.
- d. Actively solicits another person's comments or opinions.
- e. Offers opinions forcefully without domineering.
- g. Gives reasons in support of opinions expressed.
- h. Clarifies, illustrates, or expands on a response when asked to do so; asks classmates for similar expansions.

HS-ACS-7. Students will perform permanent wave techniques in accordance with manufacturers' directions.

- a. Demonstrate procedures for performing advanced permanent waving techniques.
- b. Demonstrate the practice of effective draping of the client to insure safety in the workplace and community.
- c. Analyze scalp, hair, and skin for diseases or disorders in order to avoid adverse reaction and determine the proper chemical for the client.
- d. Demonstrate knowledge of chemical and physical energy by shampooing, permanent waving, and shaping the hair.
- e. Select appropriate solution and strength, by measuring and mixing, according to hair texture and desired results.
- f. Demonstrate strand test and test curl.
- g. Demonstrate knowledge of the chemistry involved in different types of permanent waves and soft curl permanent waves.
- h. Explain what happens during the neutralization process of a permanent waves.
- i. Describe the chemical effects on hair and skin.
- j. Identify structural changes that occur during permanent waving.
- k. Distinguish between rod sizes and desired curl formation.
- l. Demonstrate correct blocking, sectioning and wrapping techniques for short, medium and long hair.
- m. Demonstrate proper procedure and application of chemicals.

Academic Standard(s):

SC1. Students will analyze the nature of matter and its classifications.

- b. Identify substances based on chemical and physical properties.

SPS6. Students will investigate the properties of solutions.

- d. Compare and contrast the components and properties of acids and bases.

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SC7. Students will characterize the properties that describe solutions and the nature of acids and bases

- b. Compare, contrast, and evaluate the nature of acids and bases:
- c. PH
- d. Acid-Base neutralization.

SPS6. Students will investigate the properties of solutions.

- d. Compare and contrast the components and properties of acids and bases.

HS-ACS-8. Students will explain the differences between giving a perm to virgin hair and hair that has been previously treated with color or lightening products.

- a. Identify different types of hair.
- b. Compare virgin application to chemically treated application.
- c. Investigate possible solutions for uneven curl formation.
- d. Demonstrate knowledge of possible adverse chemical reactions to the skin.
- e. Apply and explain the importance of a protective barrier cream.

Academic Standard(s):

SCSh3. Students will identify and investigate problems scientifically.

- a. Suggest reasonable hypotheses for identified problems.
- b. Develop procedures for solving scientific problems.
- c. Collect, organize and record appropriate data.
- e. Develop reasonable conclusions based on data collected.

Advanced Styling and Shaping Principles

Students will create hairstyles for all types and lengths of hair using shaping fundamentals while incorporating various styling techniques. Students will provide styling and finishing techniques to complete a hairstyle to the satisfaction of the client. Marketing professional salon products strategies will be explored.

HS-ACS-9. Students will create various wearable and marketable day, evening, and formal hairstyles on live models/mannequins using hair design principles.

- a. Determine the desired result during consultation period.
- b. Assemble the necessary supplies and products needed.
- c. Determine the best technique to achieve results.
- d. Prepare the model for the service to be performed.
- e. Explain methods used to execute advanced styling.
- g. Create hairstyles utilizing principles of design.
- h. Create hairstyles using wet sets, comb-outs, blow dry styles, fingerwaves, pincurls, thermal curling, and roller placement.

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DRAFT

- i. Create hairstyles going from day wear to evening wear.
- j. Demonstrate men's hair styling.
- k. Explain current trends in styling.

HS-ACS-10. Students will design and create competitive hairstyles.

- a. Identify the principles of fashion trend styling.
- b. Create hairstyles utilizing principles of design.
- c. Identify the principles of sculpting, molding, and wrapping the hair.
- d. Identify different styling aids and their functions.
- e. Use different tools to design a hairstyle.

HS-ACS-11. Students will perform advanced shaping techniques.

- a. Identify the principles of precision haircutting.
- b. Identify the principles of clipper designing.
- c. Identify the elements of line and design.

Academic Standard(s):

MA1G4. Students will understand the properties of circles.

- c. Use the properties of circles to solve problems involving the length of an arc and the area of a sector.

MA1G1. Students will investigate properties of geometric figures in the coordinate plane.

- a. Determine the distance between two points.
- b. Determine the distance between a point and a line.
- c. Determine the midpoint of a segment.

HS-ACS-12. Students will display continuity of salon services they have previously mastered.

- a. Demonstrate application of skills through salon services via client or mannequin (hairstyling, chemical, skin, and nail services, etc.).

Reading Across the Curriculum

Reading Standard Comment

After the elementary years, students engage in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts, mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific vocabulary, and for

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 - Evaluate the merit of texts in every subject discipline.
 - Examine author's purpose in writing.
 - Recognize the features of disciplinary texts.
- k. Building vocabulary knowledge
 - Demonstrate an understanding of contextual vocabulary in various subjects.
 - Use content vocabulary in writing and speaking.
 - Explore understanding of new words found in subject area texts.
- l. Establishing context
 - Explore life experiences related to subject area content.

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- Discuss in both writing and speaking how certain words are subject area related.
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CTAE-FS-11 Entrepreneurship: Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.

PROGRAM CONCENTRATION:

CAREER PATHWAY:

COURSE TITLE:

Healthcare Science

Personal Care Services

Cosmetology Internship I

Course Description: This laboratory course provides experiences necessary for the development of skill levels required to become a cosmetologist. This course provides a portion of hours approved by the Georgia State Board of Cosmetology. The tasks specified by this course will allow a student to earn credit hours toward completion of the 1500 hours required by the Georgia State Board of Cosmetology. This course provides more in-depth competencies for the co-curricular student organization SkillsUSA and presents integral components that should be incorporated throughout instructional strategies developed for the course. In addition, this course offers the possibility of meeting articulation alignment with the technical college standards. Topics for this course include: chemical texturing, haircolor and bleaching, skin, scalp, and hair treatments, styling, haircutting, manicuring and pedicuring.

Chemical Texture Services

Students will enhance technical skill for permanent waves, chemical hair relaxers, and soft curl permanents. Student will adhere to state board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

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HS-CI-I-1. Students will perform hair relaxation and wave formation techniques in accordance with the manufacturers' directions.

- a. Consulting with clients to determine their needs and preferences.
- b. Conducting services in a safe environment, taking measures to prevent the spread of infectious and contagious diseases.

HS-CI-I-2. Students will demonstrate knowledge of procedural tools and communication/consultation to include client release and record card forms.

- a. Generate questions to provide a client consultation.
- b. Determine if the client is eligible to receive service by analyzing the hair/scalp to identify scalp and hair conditions
- c. Record information on client intake form.

Academic Standard(s):

SCSh3 Students will identify and investigate problems scientifically.

- c. Collect, organize, and record appropriate data.
- e. Develop reasonable conclusions based on data collected.

HS-CI-I-3. Students will demonstrate knowledge of the product used and its chemistry foundation.

- a. Students demonstrate the knowledge of product used and follow all manufacturers' directions.
- b. Students perform various chemical texturing services based on the needs and preferences of the clients.

HS-CI-I-4. Students will perform the appropriate number of applications on mannequins/clients, as directed by the instructor, toward completion of State Board requirements.

- a. Perform 9 permanent waving applications.
- b. Perform 4 virgin chemical hair relaxing applications.
- c. Perform 5 retouch chemical hair relaxing applications.
- d. Perform 1 soft curl permanent application.

Academic Standard(s):

SC5 Students will understand that the rate at which a chemical reaction occurs can be affected by changing concentration, temperature, or pressure and the addition of a catalyst.

- a. Demonstrate the effects of changing concentration, temperature, and pressure on chemical reactions.

SC7 Students will characterize the properties that describe solutions and the nature of acids and bases.

- a. Explain the process of dissolving in terms of solute/solvent interactions:
- b. Compare, contrast, and evaluate the nature of acids and bases:
 - Arrhenius, Bronsted-Lowry Acid/Bases
 - Strong vs. weak acids/bases in terms of percent dissociation
 - pH
 - Acid-Base neutralization

Haircoloring and Bleaching

Students will enhance technical skill for haircoloring and bleaching. Services will include temporary, semi-permanent, demi-permanent, and permanent haircolor. Students will perform a variety of highlight services including cap, foil, and freehand techniques. Students will adhere to State Board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

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HS-CI-I-5. Students will perform the applications of, safety of, and chemistry involved with haircoloring and bleaching agents.

- a. Conduct a color service in accordance with a client's needs or expectations.
- b. Consult with clients to determine their needs and preferences.
- c. Use a variety of salon products while providing client services.
- d. Conduct services in a safe environment by taking measures to prevent the spread of infectious and contagious diseases.

HS-CI-I-6. Students will perform the appropriate number of color applications on mannequins/clients, as directed by the instructor, toward completion of State Board requirements

- a. Perform 1 application of temporary color.
- b. Perform 1 application of semi/demi color.
- c. Perform 4 applications of permanent color.
- d. Perform 4 applications of retouch permanent color.
- e. Perform 1 application of bleach products.
- f. Perform 2 applications of retouch bleach products.
- g. Perform a lash and brow tint.
- h. Perform 1 foiling technique.
- i. Perform 1 cap technique.

Academic Standard(s):

SCSh4 Students will use tools and instruments for observing, measuring, and manipulating scientific equipment and materials.

SCSh5 Students will demonstrate the computation and estimation skills necessary for analyzing data and developing reasonable scientific explanations.

- a. Consider possible effects of measurement errors on calculations.

SPS6 Students will investigate the properties of solutions.

- a. Describe solutions in terms of
 - solute/solvent
- b. Observe factors affecting the rate a solute dissolves in a specific solvent.

SC5 Students will understand that the rate at which a chemical reaction occurs can be affected by changing concentration, temperature, or pressure and the addition of a catalyst.

- b. Investigate the effects of a catalyst on chemical reactions and apply it to everyday examples.

HS-CI-I-7. Students will demonstrate knowledge of formulations and various applications.

- a. Identify the client's natural level.
- b. Determine classification of color used.
- c. Apply color/bleach using brush or bottle method with appropriate sectioning.
- d. Determine when to use retouch or virgin procedures for applications.
- e. Determine which foiling technique is to be used (foiling, freehand, cap, etc).
- f. Conduct a predisposition test for possible allergies prior to service.

Academic Standard(s):

SCSh3 Students will identify and investigate problems scientifically.

- a. Develop reasonable conclusions based on data collected.
- b. Evaluate whether conclusions are reasonable by reviewing the process and checking against other available information.

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Skin, Scalp, and Hair Treatments

Students will enhance technical skill for skin, scalp, and hair treatments. Students will adhere to State Board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-I-8. Students will perform the application techniques and theory in the treatment of the skin, scalp, and hair.

- a. Conduct services in a safe environment and taking measures to prevent the spread of infectious and contagious diseases.
- b. Use a variety of salon products while providing services.
- c. Effectively market professional salon products.

HS-CI-I-9. Students will follow safety precautions for all skin, scalp, and hair treatments.

- a. Generate questions to perform client consultation and analyze skin, scalp, and hair for disorders prior to performing treatment procedures.
- b. Demonstrate safety precautions for all electrical equipment.

HS-CI-I-10. Students will identify electrical equipment for scalp and facial treatments.

Academic Standard(s):

SPS7 Students will relate transformations and flow of energy within a system.

HS-CI-I-11. Students will identify cosmetic chemistry products and supplies used for the face, hair, and scalp.

- a. Identify products and supplies needed to give facial treatments.
- b. Identify products and supplies needed to give scalp treatments.
- c. Identify products and supplies needed to give hair treatments.

Academic Standard(s):

SCSh3 Students will identify and investigate problems scientifically.

- e. Develop reasonable conclusions based on data collected.
- f. Evaluate whether conclusions are reasonable by reviewing the process and checking against other available information.

HS-CI-I-12. Student will perform corrective hair and scalp treatments.

- a. Demonstrate procedures involved in a corrective scalp treatment for oily and dry scalp.
- b. Demonstrate procedures involved in a corrective hair treatment for dry and oily hair.

HS-CI-I-13. Students will perform facial procedures.

- a. Demonstrate massage manipulations.
- b. Perform procedures for an oily skin facial.
- c. Perform procedures for a dry skin facial.

HS-CI-I-14. Perform the appropriate number of applications on mannequins/clients, as directed by the instructor, toward completion of State Board requirements.

- a. Perform 5 facials.

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- b. Perform 5 scalp treatments.
- c. Perform 7 hair treatments.
- d. Perform 4 lip, chin and face hair removal services.
- e. Perform 4 brow tweezing.
- f. Perform 4 brow waxing.

Hair Design

Students will enhance general hair design skills including wet hairstyling, thermal hairstyling and special occasion hairstyling. Students will interpret designs as well as create their own designs. Students will adhere to State Board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-I-15. Students will provide styling and finishing techniques to complete a hairstyle to the satisfaction of the client.

- a. Consult with the client to determine needs and preferences.
- b. Research the history of hairstyling and how it has evolved to current trends.
- c. Interpret and analyze bone and muscular structure to determine complimentary hairstyles.

HS-CI-I-16. Students will be able to enhance their skills from previous courses in the fundamental theory and skills required for hairstyling design to a advanced skill level in hairstyling, including: updo's, hair wrapping, thermal hairstyling, roller sets, pincurls, finger waves, chignons, French twist, hair pressing, braiding and hair extensions.

- a. Demonstrate the ability to utilize and control the hairstyle using the design elements and principles within a two- or three-dimensional context.
- b. Interpret a composition analysis of hair design as it relates to balance, contrast, repetition, alternation, and proportional relationships.
- c. Construct a portfolio of hair designs reflecting the history of hairstyling research.
- d. Generate different hairstyles for different body proportions to create a balance hair design.
- e. Demonstrate proper design compositions in hair designs using form, lines, texture, and color as a guide.
- f. Illustrate different designs using design principles including repetition, alternation, progression, contrast, and balance.

HS-CI-I-17. Students will perform the appropriate number of styles, as directed by the instructor, to meet State Board requirements.

- a. Perform 10 wet sets.
- b. Perform 14 comb outs.
- c. Perform 4 blow dry styles to include Marcel Iron.
- d. Perform 1 pincurl style.
- e. Perform 1 finger wave style.

Hair Cutting

Students will enhance technical skills for haircutting. Students will work with a variety of haircutting tools including shears, razor, thinning shears, and clippers. Students will perform haircuts to client specification. Students will adhere to State Board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

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HS-CI-I-18. Students will perform haircuts in accordance with a client's needs or expectations.

- a. Introduce theory and skills necessary to apply haircutting techniques.
- b. Consult with clients to determine their needs and preferences.

HS-CI-I-19. Students will identify terms associated with haircutting.

Academic Standard(s):

ELA10RL5 The student understands and acquires new vocabulary and uses it correctly in reading and writing.

HS-CI-I-20. Students will follow safety practices and decontamination during haircutting procedures.

- a. Demonstrate knowledge of client protection during service.
- b. Demonstrate safe handling of implements while cutting.
- c. Identify appropriate procedures for storing sanitizing and storing implements.
- d. Demonstrate importance of sterilization and sanitation rules while cutting.

HS-CI-I-21. Students will perform the appropriate number of haircuts, as directed by the instructor, to meet State Board requirements.

- a. Perform 15 haircutting techniques.

Academic Standards(s):

MM2G1. Students will identify and use special right triangles.

HS-CI-I-22. Students will perform client consultation.

- a. Analyze client's hair and scalp condition.
- b. Perform a head/hair/body analysis.

Academic Standard(s):

ELA11LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

- a. Initiates new topics in addition to responding to adult-initiated topics.
- b. Asks relevant questions.
- c. Responds to questions with appropriate information.

HS-CI-I-23. Students will identify cutting implements.

- a. Identify haircutting implements and their functions.
- b. Demonstrate how to hold, use, and care for implements.

HS-CI-I-24. Students will identify various haircutting techniques.

- a. Demonstrate sectioning in haircutting.
- b. Identify traveling and stationary guidelines.
- c. Demonstrate 0 elevation, 180 degree, 45 degree, and 90 degree cuts.
- d. Demonstrate cuts using shears, razor, and clippers.
- e. Demonstrate various texture techniques in haircutting.
- f. Demonstrate cross-checking a haircut for accuracy.

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Academic Standard(s):

MM1G1. Students will investigate properties of geometric figures in the coordinate

- a. plane.
- b. Determine the distance between two points.
- c. Determine the distance between a point and a line.

MM2G1. Students will identify and use special right triangles.

Nail Care

Students will enhance technical skills for manicuring, pedicuring, and advanced nail procedures. Students will adhere to State Board criteria. Students will work toward mastering techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-I-25. Students will provide basic manicures and pedicures to the satisfaction of the client.

- a. Consulting with clients to determine their needs and preferences.
- b. Conducting services in a safe environment and take measures to prevent the spread of infectious and contagious diseases.

HS-CI-I-26. Students will perform the appropriate number of applications, as directed by the instructor, to meet State Board requirements.

- a. Perform 4 manicures.
- b. Perform 2 pedicures.
- c. Perform 1 advanced nail technique.

Reception

Students will perform receptionist duties to acquired hours. Students will take appointments, answer phone, greet clients.

HS-CI-I-27. Students will perform the required hours, as directed by the instructor, in order to meet State Board requirements.

- a. Perform 9 hours of receptionist duties.

Academic Standard(s):

ELA9LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

- a. Initiates new topics and responds to adult-initiated topics.
- b. Asks relevant questions.
- c. Responds to questions with appropriate information.

Dispensary

Students will work in dispensary in order to fulfill required number of hours needed for State Board. Students will be responsible for mixing color, perms, etc. Students will also disinfect and sanitize used equipment.

HS-CI- I-28. Students will mix, fill, and dispense products to other students.

- a. Perform 9 hours of dispensary time

Academic Standard(s):

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SCSh2. Students will use standard safety practices for all classroom laboratory and field investigations.

- a. Follow correct procedures for use of scientific apparatus.
- b. Demonstrate appropriate technique in all laboratory situations.
- c. Follow correct protocol for identifying and reporting safety problems and violations.

Reading Across the Curriculum

Reading Standard Comment

After the elementary years, students engage in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts, mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific vocabulary, and for students to excel in all subjects, they must learn the specific vocabulary of those subject areas in context.

Beginning with the middle grades years, students begin to self-select reading materials based on personal interests established through classroom learning. Students become curious about science, mathematics, history, and literature as they form contexts for those subjects related to their personal and classroom experiences. As students explore academic areas through reading, they develop favorite subjects and become confident in their verbal discourse about those subjects.

Reading across curriculum content develops both academic and personal interests in students. As students read, they develop both content and contextual vocabulary. They also build good habits for reading, researching, and learning. The Reading Across the Curriculum standard focuses on the academic and personal skills students acquire as they read in all areas of learning.

Students will enhance reading in all curriculum areas by:

- k. Reading in all curriculum areas
 - Read a minimum of 25 grade-level appropriate books per year from a variety of subject disciplines and participate in discussions related to curricular learning in all areas.
 - Read both informational and fictional texts in a variety of genres and modes of discourse.
 - Read technical texts related to various subject areas.
- l. Discussing books
 - Discuss messages and themes from books in all subject areas.
 - Respond to a variety of texts in multiple modes of discourse.
 - Relate messages and themes from one subject area to messages and themes in another area.
 - Evaluate the merit of texts in every subject discipline.
 - Examine author's purpose in writing.
 - Recognize the features of disciplinary texts.
- m. Building vocabulary knowledge
 - Demonstrate an understanding of contextual vocabulary in various subjects.
 - Use content vocabulary in writing and speaking.
 - Explore understanding of new words found in subject area texts.

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- n. Establishing context
- Explore life experiences related to subject area content.
 - Discuss in both writing and speaking how certain words are subject area related.
 - Determine strategies for finding content and contextual meaning for unknown words.

CTAE Foundation Skills

The Foundation Skills for Career, Technical and Agricultural Education (CTAE) are critical competencies that students pursuing any career pathway should exhibit to be successful. As core standards for all career pathways in all program concentrations, these skills link career, technical and agricultural education to the state's academic performance standards.

The CTAE Foundation Skills are aligned to the foundation of the U. S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by a national advisory group of employers, secondary and postsecondary educators, labor associations, and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy.

CTAE-FS-1 Technical Skills: Learners achieve technical content skills necessary to pursue the full range of careers for all pathways in the program concentration.

CTAE-FS-2 Academic Foundations: Learners achieve state academic standards at or above grade level.

CTAE-FS-3 Communications: Learners use various communication skills in expressing and interpreting information.

CTAE-FS-4 Problem Solving and Critical Thinking: Learners define and solve problems, and use problem-solving and improvement methods and tools.

CTAE-FS-5 Information Technology Applications: Learners use multiple information technology devices to access, organize, process, transmit, and communicate information.

CTAE-FS-6 Systems: Learners understand a variety of organizational structures and functions.

CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.

CTAE-FS-8 Leadership and Teamwork: Learners apply leadership and

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teamwork skills in collaborating with others to accomplish organizational goals and objectives.

CTAE-FS-9 Ethics and Legal Responsibilities: Learners commit to work ethics, behavior, and legal responsibilities in the workplace.

CTAE-FS-10 Career Development: Learners plan and manage academic-career plans and employment relations.

CTAE-FS-11 Entrepreneurship: Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.

PROGRAM CONCENTRATION:

Healthcare Science

CAREER PATHWAY:

Personal Care Services

COURSE TITLE:

Cosmetology Internship II

Course Description: This laboratory course provides experiences necessary for the development of skill levels required to become a cosmetologist. This course provides a portion of hours approved by the Georgia State Board of Cosmetology. The tasks specified by this course will allow a student to earn credit hours toward completion of the 1500 hours required by the Georgia State Board of Cosmetology. This course provides more in-depth competencies for the co-curricular student organization SkillsUSA and presents integral components that should be incorporated throughout instructional strategies developed for the course. In addition, this course offers the possibility of meeting articulation alignment with the technical college standards. Topics for this course include: chemical texturing, haircolor and bleaching, skin, scalp, and hair treatments, styling, haircutting, manicuring and pedicuring.

Chemical Texture Services

Students will enhance technical skill for permanent waves, chemical hair relaxers, and soft curl permanents. Student will adhere to state board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-II-1. Students will perform hair relaxation and wave formation techniques in accordance with the manufacturers' directions.

- a. Consulting with clients to determine their needs and preferences.
- b. Conducting services in a safe environment, taking measures to prevent the spread of infectious and contagious diseases.

HS-CI-II-2. Students will demonstrate knowledge of procedural tools and communication/consultation to include client release and record card forms.

- a. Generate questions to provide a client consultation.
- b. Determine if the client is eligible to receive service by analyzing the hair/scalp to identify scalp and hair conditions
- d. Record information on client intake form.

Academic Standard(s):

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SCSh3 Students will identify and investigate problems scientifically.

- c. Collect, organize, and record appropriate data.
- e. Develop reasonable conclusions based on data collected.

HS-CI-II-3. Students will demonstrate knowledge of the product used and its chemistry foundation.

- a. Students demonstrate the knowledge of product used and follow all manufacturers' directions.
- c. Students perform various chemical texturing services based on the needs and preferences of the clients.

HS-CI-II-4. Students will perform the appropriate number of applications on mannequins/clients, as directed by the instructor, toward completion of State Board requirements.

- a. Perform 9 permanent waving applications.
- b. Perform 4 virgin chemical hair relaxing applications.
- c. Perform 5 retouch chemical hair relaxing applications.
- d. Perform 1 soft curl permanent application.

Academic Standard(s):

SC5 Students will understand that the rate at which a chemical reaction occurs can be affected by changing concentration, temperature, or pressure and the addition of a catalyst.

- a. Demonstrate the effects of changing concentration, temperature, and pressure on chemical reactions.

SC7 Students will characterize the properties that describe solutions and the nature of acids and bases.

- a. Explain the process of dissolving in terms of solute/solvent interactions:
- b. Compare, contrast, and evaluate the nature of acids and bases:
 - Arrhenius, Bronsted-Lowry Acid/Bases
 - Strong vs. weak acids/bases in terms of percent dissociation
 - pH
 - Acid-Base neutralization

Haircoloring and Bleaching

Students will enhance technical skill for haircoloring and bleaching. Services will include temporary, semi-permanent, demi-permanent, and permanent haircolor. Students will perform a variety of highlight services including cap, foil, and freehand techniques. Students will adhere to State Board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-II-5. Students will perform the applications of, safety of, and chemistry involved with haircoloring and bleaching agents.

- a. Conduct a color service in accordance with a client's needs or expectations.
- b. Consult with clients to determine their needs and preferences.
- c. Use a variety of salon products while providing client services.
- d. Conduct services in a safe environment by taking measures to prevent the spread of infectious and contagious diseases.

HS-CI-II-6. Students will perform the appropriate number of color applications on mannequins/clients, as directed by the instructor, toward completion of State Board requirements

- a. Perform 1 application of temporary color.
- b. Perform 1 application of semi/demi color.
- c. Perform 4 applications of permanent color.

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- d. Perform 4 applications of retouch permanent color.
- j. Perform 1 application of bleach products.
- k. Perform 2 applications of retouch bleach products.
- l. Perform a lash and brow tint.
- m. Perform 1 foiling technique.
- n. Perform 1 cap technique.

Academic Standard(s):

SCSh4 Students will use tools and instruments for observing, measuring, and manipulating scientific equipment and materials.

SCSh5 Students will demonstrate the computation and estimation skills necessary for analyzing data and developing reasonable scientific explanations.

- c. Consider possible effects of measurement errors on calculations.

SPS6 Students will investigate the properties of solutions.

- a. Describe solutions in terms of
 - solute/solvent
- b. Observe factors affecting the rate a solute dissolves in a specific solvent.

SC5 Students will understand that the rate at which a chemical reaction occurs can be affected by changing concentration, temperature, or pressure and the addition of a catalyst.

- d. Investigate the effects of a catalyst on chemical reactions and apply it to everyday examples.

HS-CI-II-7. Students will demonstrate knowledge of formulations and various applications.

- a. Identify the client's natural level.
- b. Determine classification of color used.
- c. Apply color/bleach using brush or bottle method with appropriate sectioning.
- d. Determine when to use retouch or virgin procedures for applications.
- e. Determine which foiling technique is to be used (foiling, freehand, cap, etc).
- f. Conduct a predisposition test for possible allergies prior to service.

Academic Standard(s):

SCSh3 Students will identify and investigate problems scientifically.

- b. Develop reasonable conclusions based on data collected.
- b. Evaluate whether conclusions are reasonable by reviewing the process and checking against other available information.

Skin, Scalp, and Hair Treatments

Students will enhance technical skill for skin, scalp, and hair treatments. Students will adhere to State Board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-II-8. Students will perform the application techniques and theory in the treatment of the skin, scalp, and hair.

- a. Conduct services in a safe environment and taking measures to prevent the spread of infectious and contagious diseases.
- b. Use a variety of salon products while providing services.
- c. Effectively market professional salon products.

HS-CI-II-9. Students will follow safety precautions for all skin, scalp, and hair treatments.

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- a. Generate questions to perform client consultation and analyze skin, scalp, and hair for disorders prior to performing treatment procedures.
- b. Demonstrate safety precautions for all electrical equipment.

HS-CI-II-10. Students will identify electrical equipment for scalp and facial treatments.

Academic Standard(s):

SPS7 Students will relate transformations and flow of energy within a system.

HS-CI-II-11. Students will identify cosmetic chemistry products and supplies used for the face, hair, and scalp.

- d. Identify products and supplies needed to give facial treatments.
- e. Identify products and supplies needed to give scalp treatments.
- f. Identify products and supplies needed to give hair treatments.

Academic Standard(s):

SCSh3 Students will identify and investigate problems scientifically.

- e. Develop reasonable conclusions based on data collected.
- f. Evaluate whether conclusions are reasonable by reviewing the process and checking against other available information.

HS-CI-II-12. Student will perform corrective hair and scalp treatments.

- c. Demonstrate procedures involved in a corrective scalp treatment for oily and dry scalp.
- d. Demonstrate procedures involved in a corrective hair treatment for dry and oily hair.

HS-CI-II-13. Students will perform facial procedures.

- a. Demonstrate massage manipulations.
- b. Perform procedures for an oily skin facial.
- c. Perform procedures for a dry skin facial.

HS-CI-II-14. Perform the appropriate number of applications on mannequins/clients, as directed by the instructor, toward completion of State Board requirements.

- g. Perform 5 facials.
- h. Perform 5 scalp treatments.
- i. Perform 7 hair treatments.
- j. Perform 4 lip, chin and face hair removal services.
- k. Perform 4 brow tweezing.
- l. Perform 4 brow waxing.

Hair Design

Students will enhance general hair design skills including wet hairstyling, thermal hairstyling and special occasion hairstyling. Students will interpret designs as well as create their own designs. Students will adhere to State Board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-II-15. Students will provide styling and finishing techniques to complete a hairstyle to the satisfaction of the client.

- d. Consult with the client to determine needs and preferences.

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- e. Research the history of hairstyling and how it has evolved to current trends.
- f. Interpret and analyze bone and muscular structure to determine complimentary hairstyles.

HS-CI-II-16. Students will be able to enhance their skills from previous courses in the fundamental theory and skills required for hairstyling design to a advanced skill level in hairstyling, including: updo's, hair wrapping, thermal hairstyling, roller sets, pincurls, finger waves, chignons, French twist, hair pressing, braiding and hair extensions.

- g. Demonstrate the ability to utilize and control the hairstyle using the design elements and principles within a two- or three-dimensional context.
- h. Interpret a composition analysis of hair design as it relates to balance, contrast, repetition, alternation, and proportional relationships.
- i. Construct a portfolio of hair designs reflecting the history of hairstyling research.
- j. Generate different hairstyles for different body proportions to create a balance hair design.
- k. Demonstrate proper design compositions in hair designs using form, lines, texture, and color as a guide.
- l. Illustrate different designs using design principles including repetition, alternation, progression, contrast, and balance.

HS-CI-II-17. Students will perform the appropriate number of styles, as directed by the instructor, to meet State Board requirements.

- f. Perform 10 wet sets.
- g. Perform 14 comb outs.
- h. Perform 4 blow dry styles to include Marcel Iron.
- i. Perform 1 pincurl style.
- j. Perform 1 finger wave style.

Hair Cutting

Students will enhance technical skills for haircutting. Students will work with a variety of haircutting tools including shears, razor, thinning shears, and clippers. Students will perform haircuts to client specification. Students will adhere to State Board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-II-18. Students will perform haircuts in accordance with a client's needs or expectations.

- a. Introduce theory and skills necessary to apply haircutting techniques.
- b. Consult with clients to determine their needs and preferences.

HS-CI-II-19. Students will identify terms associated with haircutting.

Academic Standard(s):

ELA10RL5 The student understands and acquires new vocabulary and uses it correctly in reading and writing.

HS-CI-II-20. Students will follow safety practices and decontamination during haircutting procedures.

- e. Demonstrate knowledge of client protection during service.
- f. Demonstrate safe handling of implements while cutting.
- g. Identify appropriate procedures for storing sanitizing and storing implements.
- h. Demonstrate importance of sterilization and sanitation rules while cutting.

HS-CI-II-21. Students will perform the appropriate number of haircuts, as directed by the instructor, to

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meet State Board requirements.

- a. Perform 15 haircutting techniques.

Academic Standard(s):

MM2G1. Students will identify and use special right triangles.

HS-CI-II-22. Students will perform client consultation.

- c. Analyze client's hair and scalp condition.
- d. Perform a head/hair/body analysis.

Academic Standard(s):

ELA11LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

- a. Initiates new topics in addition to responding to adult-initiated topics.
- b. Asks relevant questions.
- c. Responds to questions with appropriate information.

HS-CI-II-23. Students will identify cutting implements.

- c. Identify haircutting implements and their functions.
- d. Demonstrate how to hold, use, and care for implements.

HS-CI-II-24. Students will identify various haircutting techniques.

- g. Demonstrate sectioning in haircutting.
- h. Identify traveling and stationary guidelines.
- i. Demonstrate 0 elevation, 180 degree, 45 degree, and 90 degree cuts.
- j. Demonstrate cuts using shears, razor, and clippers.
- k. Demonstrate various texture techniques in haircutting.
- l. Demonstrate cross-checking a haircut for accuracy.

Academic Standard(s):

MM1G1. Students will investigate properties of geometric figures in the coordinate

- a. plane.
- b. Determine the distance between two points.
- c. Determine the distance between a point and a line.

MM2G1. Students will identify and use special right triangles.

Nail Care

Students will enhance technical skills for manicuring, pedicuring, and advanced nail procedures. Students will adhere to State Board criteria. Students will work toward mastering techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-II-25. Students will provide basic manicures and pedicures to the satisfaction of the client.

- a. Consulting with clients to determine their needs and preferences.
- b. Conducting services in a safe environment and take measures to prevent the spread of infectious and contagious diseases.

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HS-CI-II-26. Students will perform the appropriate number of applications, as directed by the instructor, to meet State Board requirements.

- a. Perform 4 manicures.
- b. Perform 2 pedicures.
- c. Perform 1 advanced nail technique.

Reception

Students will perform receptionist duties to acquired hours. Students will take appointments, answer phone, greet clients.

HS-CI-II-27. Students will perform the required hours, as directed by the instructor, in order to meet State Board requirements.

- a. Perform 9 hours of receptionist duties.

Academic Standard(s):

ELA9LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

- a. Initiates new topics and responds to adult-initiated topics.
- b. Asks relevant questions.
- c. Responds to questions with appropriate information.

Dispensary

Students will work in dispensary in order to fulfill required number of hours needed for State Board. Students will be responsible for mixing color, perms, etc. Students will also disinfect and sanitize used equipment.

HS-CI-II-28. Students will mix, fill, and dispense products to other students.

- a. Perform 9 hours of dispensary time

Academic Standard(s):

SCSh2. Students will use standard safety practices for all classroom laboratory and field investigations.

- a. Follow correct procedures for use of scientific apparatus.
- b. Demonstrate appropriate technique in all laboratory situations.
- c. Follow correct protocol for identifying and reporting safety problems and violations.

Reading Across the Curriculum

Reading Standard Comment

After the elementary years, students engage in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts, mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific vocabulary, and for students to excel in all subjects, they must learn the specific vocabulary of those subject areas in context.

Beginning with the middle grades years, students begin to self-select reading materials based on personal interests

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established through classroom learning. Students become curious about science, mathematics, history, and literature as they form contexts for those subjects related to their personal and classroom experiences. As students explore academic areas through reading, they develop favorite subjects and become confident in their verbal discourse about those subjects.

Reading across curriculum content develops both academic and personal interests in students. As students read, they develop both content and contextual vocabulary. They also build good habits for reading, researching, and learning. The Reading Across the Curriculum standard focuses on the academic and personal skills students acquire as they read in all areas of learning.

Students will enhance reading in all curriculum areas by:

- m. Reading in all curriculum areas
 - Read a minimum of 25 grade-level appropriate books per year from a variety of subject disciplines and participate in discussions related to curricular learning in all areas.
 - Read both informational and fictional texts in a variety of genres and modes of discourse.
 - Read technical texts related to various subject areas.
- n. Discussing books
 - Discuss messages and themes from books in all subject areas.
 - Respond to a variety of texts in multiple modes of discourse.
 - Relate messages and themes from one subject area to messages and themes in another area.
 - Evaluate the merit of texts in every subject discipline.
 - Examine author's purpose in writing.
 - Recognize the features of disciplinary texts.
- o. Building vocabulary knowledge
 - Demonstrate an understanding of contextual vocabulary in various subjects.
 - Use content vocabulary in writing and speaking.
 - Explore understanding of new words found in subject area texts.
- p. Establishing context
 - Explore life experiences related to subject area content.
 - Discuss in both writing and speaking how certain words are subject area related.
 - Determine strategies for finding content and contextual meaning for unknown words.

CTAE Foundation Skills

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The CTAE Foundation Skills are aligned to the foundation of the U. S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by a national advisory group of employers, secondary and postsecondary educators, labor associations, and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and

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career transitions in a rapidly changing economy.

CTAE-FS-1 Technical Skills: Learners achieve technical content skills necessary to pursue the full range of careers for all pathways in the program concentration.

CTAE-FS-2 Academic Foundations: Learners achieve state academic standards at or above grade level.

CTAE-FS-3 Communications: Learners use various communication skills in expressing and interpreting information.

CTAE-FS-4 Problem Solving and Critical Thinking: Learners define and solve problems, and use problem-solving and improvement methods and tools.

CTAE-FS-5 Information Technology Applications: Learners use multiple information technology devices to access, organize, process, transmit, and communicate information.

CTAE-FS-6 Systems: Learners understand a variety of organizational structures and functions.

CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.

CTAE-FS-8 Leadership and Teamwork: Learners apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

CTAE-FS-9 Ethics and Legal Responsibilities: Learners commit to work ethics, behavior, and legal responsibilities in the workplace.

CTAE-FS-10 Career Development: Learners plan and manage academic-career plans and employment relations.

CTAE-FS-11 Entrepreneurship: Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.

PROGRAM CONCENTRATION:

CAREER PATHWAY:

COURSE TITLE:

**Healthcare Science
Personal Care Services
Cosmetology Internship III**

Implementation date

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Course Description: This laboratory course provides experiences necessary for the development of skill levels required to become a cosmetologist. This course provides a portion of hours approved by the Georgia State Board of Cosmetology. The tasks specified by this course will allow a student to earn credit hours toward completion of the 1500 hours required by the Georgia State Board of Cosmetology. This course provides more in-depth competencies for the co-curricular student organization SkillsUSA and presents integral components that should be incorporated throughout instructional strategies developed for the course. In addition, this course offers the possibility of meeting articulation alignment with the technical college standards. Topics for this course include: chemical texturing, haircolor and bleaching, skin, scalp, and hair treatments, styling, haircutting, manicuring and pedicuring.

Chemical Texture Services

Students will enhance technical skill for permanent waves, chemical hair relaxers, and soft curl permanents. Student will adhere to state board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-III-1. Students will perform hair relaxation and wave formation techniques in accordance with the manufacturers' directions.

- a. Consulting with clients to determine their needs and preferences.
- b. Conducting services in a safe environment, taking measures to prevent the spread of infectious and contagious diseases.

HS-CI-III-2. Students will demonstrate knowledge of procedural tools and communication/consultation to include client release and record card forms.

- a. Generate questions to provide a client consultation.
- b. Determine if the client is eligible to receive service by analyzing the hair/scalp to identify scalp and hair conditions
- e. Record information on client intake form.

Academic Standard(s):

SCSh3 Students will identify and investigate problems scientifically.

- c. Collect, organize, and record appropriate data.
- e. Develop reasonable conclusions based on data collected.

HS-CI-III-3. Students will demonstrate knowledge of the product used and its chemistry foundation.

- a. Students demonstrate the knowledge of product used and follow all manufacturers' directions.
- d. Students perform various chemical texturing services based on the needs and preferences of the clients.

HS-CI-III-4. Students will perform the appropriate number of applications on mannequins/clients, as directed by the instructor, toward completion of State Board requirements.

- a. Perform 9 permanent waving applications.
- b. Perform 4 virgin chemical hair relaxing applications.
- c. Perform 5 retouch chemical hair relaxing applications.
- d. Perform 1 soft curl permanent application.

Academic Standard(s):

SC5 Students will understand that the rate at which a chemical reaction occurs can be affected by changing concentration, temperature, or pressure and the addition of a catalyst.

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- a. Demonstrate the effects of changing concentration, temperature, and pressure on chemical reactions.

SC7 Students will characterize the properties that describe solutions and the nature of acids and bases.

- a. Explain the process of dissolving in terms of solute/solvent interactions:
- b. Compare, contrast, and evaluate the nature of acids and bases:
 - Arrhenius, Bronsted-Lowry Acid/Bases
 - Strong vs. weak acids/bases in terms of percent dissociation
 - pH
 - Acid-Base neutralization

Haircoloring and Bleaching

Students will enhance technical skill for haircoloring and bleaching. Services will include temporary, semi-permanent, demi-permanent, and permanent haircolor. Students will perform a variety of highlight services including cap, foil, and freehand techniques. Students will adhere to State Board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-III-5. Students will perform the applications of, safety of, and chemistry involved with haircoloring and bleaching agents.

- a. Conduct a color service in accordance with a client's needs or expectations.
- b. Consult with clients to determine their needs and preferences.
- c. Use a variety of salon products while providing client services.
- d. Conduct services in a safe environment by taking measures to prevent the spread of infectious and contagious diseases.

HS-CI-III-6. Students will perform the appropriate number of color applications on mannequins/clients, as directed by the instructor, toward completion of State Board requirements

- a. Perform 1 application of temporary color.
- b. Perform 1 application of semi/demi color.
- c. Perform 4 applications of permanent color.
- d. Perform 4 applications of retouch permanent color.
- o. Perform 1 application of bleach products.
- p. Perform 2 applications of retouch bleach products.
- q. Perform a lash and brow tint.
- r. Perform 1 foiling technique.
- s. Perform 1 cap technique.

Academic Standard(s):

SCSh4 Students will use tools and instruments for observing, measuring, and manipulating scientific equipment and materials.

SCSh5 Students will demonstrate the computation and estimation skills necessary for analyzing data and developing reasonable scientific explanations.

- e. Consider possible effects of measurement errors on calculations.

SPS6 Students will investigate the properties of solutions.

- a. Describe solutions in terms of
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SC5 Students will understand that the rate at which a chemical reaction occurs can be affected by changing concentration, temperature, or pressure and the addition of a catalyst.

- f. Investigate the effects of a catalyst on chemical reactions and apply it to everyday examples.

HS-CI-III-7. Students will demonstrate knowledge of formulations and various applications.

- a. Identify the client's natural level.
- b. Determine classification of color used.
- c. Apply color/bleach using brush or bottle method with appropriate sectioning.
- d. Determine when to use retouch or virgin procedures for applications.
- e. Determine which foiling technique is to be used (foiling, freehand, cap, etc).
- f. Conduct a predisposition test for possible allergies prior to service.

Academic Standard(s):

SCSh3 Students will identify and investigate problems scientifically.

- c. Develop reasonable conclusions based on data collected.
- b. Evaluate whether conclusions are reasonable by reviewing the process and checking against other available information.

Skin, Scalp, and Hair Treatments

Students will enhance technical skill for skin, scalp, and hair treatments. Students will adhere to State Board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-III-8. Students will perform the application techniques and theory in the treatment of the skin, scalp, and hair.

- a. Conduct services in a safe environment and taking measures to prevent the spread of infectious and contagious diseases.
- b. Use a variety of salon products while providing services.
- c. Effectively market professional salon products.

HS-CI-III-9. Students will follow safety precautions for all skin, scalp, and hair treatments.

- a. Generate questions to perform client consultation and analyze skin, scalp, and hair for disorders prior to performing treatment procedures.
- b. Demonstrate safety precautions for all electrical equipment.

HS-CI-III-10. Students will identify electrical equipment for scalp and facial treatments.

Academic Standard(s):

SPS7 Students will relate transformations and flow of energy within a system.

HS-CI-III-11. Students will identify cosmetic chemistry products and supplies used for the face, hair, and scalp.

- g. Identify products and supplies needed to give facial treatments.
- h. Identify products and supplies needed to give scalp treatments.
- i. Identify products and supplies needed to give hair treatments.

Academic Standard(s):

SCSh3 Students will identify and investigate problems scientifically.

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- e. Develop reasonable conclusions based on data collected.
- f. Evaluate whether conclusions are reasonable by reviewing the process and checking against other available information.

HS-CI-III-12. Student will perform corrective hair and scalp treatments.

- e. Demonstrate procedures involved in a corrective scalp treatment for oily and dry scalp.
- f. Demonstrate procedures involved in a corrective hair treatment for dry and oily hair.

HS-CI-III-13. Students will perform facial procedures.

- a. Demonstrate massage manipulations.
- b. Perform procedures for an oily skin facial.
- c. Perform procedures for a dry skin facial.

HS-CI-III-14. Perform the appropriate number of applications on mannequins/clients, as directed by the instructor, toward completion of State Board requirements.

- m. Perform 5 facials.
- n. Perform 5 scalp treatments.
- o. Perform 7 hair treatments.
- p. Perform 4 lip, chin and face hair removal services.
- q. Perform 4 brow tweezing.
- r. Perform 4 brow waxing.

Hair Design

Students will enhance general hair design skills including wet hairstyling, thermal hairstyling and special occasion hairstyling. Students will interpret designs as well as create their own designs. Students will adhere to State Board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-III-15. Students will provide styling and finishing techniques to complete a hairstyle to the satisfaction of the client.

- g. Consult with the client to determine needs and preferences.
- h. Research the history of hairstyling and how it has evolved to current trends.
- i. Interpret and analyze bone and muscular structure to determine complimentary hairstyles.

HS-CI-III-16. Students will be able to enhance their skills from previous courses in the fundamental theory and skills required for hairstyling design to a advanced skill level in hairstyling, including: updo's, hair wrapping, thermal hairstyling, roller sets, pincurls, finger waves, chignons, French twist, hair pressing, braiding and hair extensions.

- m. Demonstrate the ability to utilize and control the hairstyle using the design elements and principles within a two- or three-dimensional context.
- n. Interpret a composition analysis of hair design as it relates to balance, contrast, repetition, alternation, and proportional relationships.
- o. Construct a portfolio of hair designs reflecting the history of hairstyling research.
- p. Generate different hairstyles for different body proportions to create a balance hair design.
- q. Demonstrate proper design compositions in hair designs using form, lines, texture, and color as a guide.
- r. Illustrate different designs using design principles including repetition, alternation, progression, contrast, and balance.

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HS-CI-III-17. Students will perform the appropriate number of styles, as directed by the instructor, to meet State Board requirements.

- k. Perform 10 wet sets.
- l. Perform 14 comb outs.
- m. Perform 4 blow dry styles to include Marcel Iron.
- n. Perform 1 pincurl style.
- o. Perform 1 finger wave style.

Hair Cutting

Students will enhance technical skills for haircutting. Students will work with a variety of haircutting tools including shears, razor, thinning shears, and clippers. Students will perform haircuts to client specification. Students will adhere to State Board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-III-18. Students will perform haircuts in accordance with a client's needs or expectations.

- a. Introduce theory and skills necessary to apply haircutting techniques.
- b. Consult with clients to determine their needs and preferences.

HS-CI-III-19. Students will identify terms associated with haircutting.

Academic Standard(s):

ELA10RL5 The student understands and acquires new vocabulary and uses it correctly in reading and writing.

HS-CI-III-20. Students will follow safety practices and decontamination during haircutting procedures.

- i. Demonstrate knowledge of client protection during service.
- j. Demonstrate safe handling of implements while cutting.
- k. Identify appropriate procedures for storing sanitizing and storing implements.
- l. Demonstrate importance of sterilization and sanitation rules while cutting.

HS-CI-III-21. Students will perform the appropriate number of haircuts, as directed by the instructor, to meet State Board requirements.

- a. Perform 15 haircutting techniques.

Academic Standards(s):

MM2G1. Students will identify and use special right triangles.

HS-CI-III-22. Students will perform client consultation.

- e. Analyze client's hair and scalp condition.
- f. Perform a head/hair/body analysis.

Academic Standard(s):

ELA11LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

- a. Initiates new topics in addition to responding to adult-initiated topics.
- b. Asks relevant questions.

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- c. Responds to questions with appropriate information.

HS-CI-III-23. Students will identify cutting implements.

- e. Identify haircutting implements and their functions.
- f. Demonstrate how to hold, use, and care for implements.

HS-CI-III-24. Students will identify various haircutting techniques.

- m. Demonstrate sectioning in haircutting.
- n. Identify traveling and stationary guidelines.
- o. Demonstrate 0 elevation, 180 degree, 45 degree, and 90 degree cuts.
- p. Demonstrate cuts using shears, razor, and clippers.
- q. Demonstrate various texture techniques in haircutting.
- r. Demonstrate cross-checking a haircut for accuracy.

Academic Standard(s):

MM1G1. Students will investigate properties of geometric figures in the coordinate

- a. plane.
- b. Determine the distance between two points.
- c. Determine the distance between a point and a line.

MM2G1. Students will identify and use special right triangles.

Nail Care

Students will enhance technical skills for manicuring, pedicuring, and advanced nail procedures. Students will adhere to State Board criteria. Students will work toward mastering techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-III-25. Students will provide basic manicures and pedicures to the satisfaction of the client.

- a. Consulting with clients to determine their needs and preferences.
- b. Conducting services in a safe environment and take measures to prevent the spread of infectious and contagious diseases.

HS-CI-III-26. Students will perform the appropriate number of applications, as directed by the instructor, to meet State Board requirements.

- a. Perform 4 manicures.
- b. Perform 2 pedicures.
- c. Perform 1 advanced nail technique.

Reception

Students will perform receptionist duties to acquired hours. Students will take appointments, answer phone, greet clients.

HS-CI-III-27. Students will perform the required hours, as directed by the instructor, in order to meet State Board requirements.

- a. Perform 9 hours of receptionist duties.

Academic Standard(s):

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ELA9LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

- a. Initiates new topics and responds to adult-initiated topics.
- b. Asks relevant questions.
- c. Responds to questions with appropriate information.

Dispensary

Students will work in dispensary in order to fulfill required number of hours needed for State Board. Students will be responsible for mixing color, perms, etc. Students will also disinfect and sanitize used equipment.

HS-CI-III-28. Students will mix, fill, and dispense products to other students.

- a. Perform 9 hours of dispensary time

Academic Standard(s):

SCSh2. Students will use standard safety practices for all classroom laboratory and field investigations.

- a. Follow correct procedures for use of scientific apparatus.
- b. Demonstrate appropriate technique in all laboratory situations.
- c. Follow correct protocol for identifying and reporting safety problems and violations.

Reading Across the Curriculum

Reading Standard Comment

After the elementary years, students engage in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts, mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific vocabulary, and for students to excel in all subjects, they must learn the specific vocabulary of those subject areas in context.

Beginning with the middle grades years, students begin to self-select reading materials based on personal interests established through classroom learning. Students become curious about science, mathematics, history, and literature as they form contexts for those subjects related to their personal and classroom experiences. As students explore academic areas through reading, they develop favorite subjects and become confident in their verbal discourse about those subjects.

Reading across curriculum content develops both academic and personal interests in students. As students read, they develop both content and contextual vocabulary. They also build good habits for reading, researching, and learning. The Reading Across the Curriculum standard focuses on the academic and personal skills students acquire as they read in all areas of learning.

Students will enhance reading in all curriculum areas by:

- o. Reading in all curriculum areas
 - Read a minimum of 25 grade-level appropriate books per year from a variety of subject disciplines and participate in discussions related to curricular learning in all areas.

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- Read both informational and fictional texts in a variety of genres and modes of discourse.
- Read technical texts related to various subject areas.
- p. Discussing books
 - Discuss messages and themes from books in all subject areas.
 - Respond to a variety of texts in multiple modes of discourse.
 - Relate messages and themes from one subject area to messages and themes in another area.
 - Evaluate the merit of texts in every subject discipline.
 - Examine author's purpose in writing.
 - Recognize the features of disciplinary texts.
- q. Building vocabulary knowledge
 - Demonstrate an understanding of contextual vocabulary in various subjects.
 - Use content vocabulary in writing and speaking.
 - Explore understanding of new words found in subject area texts.
- r. Establishing context
 - Explore life experiences related to subject area content.
 - Discuss in both writing and speaking how certain words are subject area related.
 - Determine strategies for finding content and contextual meaning for unknown words.

CTAE Foundation Skills

The Foundation Skills for Career, Technical and Agricultural Education (CTAE) are critical competencies that students pursuing any career pathway should exhibit to be successful. As core standards for all career pathways in all program concentrations, these skills link career, technical and agricultural education to the state's academic performance standards.

The CTAE Foundation Skills are aligned to the foundation of the U. S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by a national advisory group of employers, secondary and postsecondary educators, labor associations, and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy.

CTAE-FS-1 Technical Skills: Learners achieve technical content skills necessary to pursue the full range of careers for all pathways in the program concentration.

CTAE-FS-2 Academic Foundations: Learners achieve state academic standards at or above grade level.

CTAE-FS-3 Communications: Learners use various communication skills in expressing and interpreting information.

CTAE-FS-4 Problem Solving and Critical Thinking: Learners define and solve problems, and use problem-solving and

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improvement methods and tools.

CTAE-FS-5 Information Technology Applications: Learners use multiple information technology devices to access, organize, process, transmit, and communicate information.

CTAE-FS-6 Systems: Learners understand a variety of organizational structures and functions.

CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.

CTAE-FS-8 Leadership and Teamwork: Learners apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

CTAE-FS-9 Ethics and Legal Responsibilities: Learners commit to work ethics, behavior, and legal responsibilities in the workplace.

CTAE-FS-10 Career Development: Learners plan and manage academic-career plans and employment relations.

CTAE-FS-11 Entrepreneurship: Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.

PROGRAM CONCENTRATION:
CAREER PATHWAY:
COURSE TITLE:

Healthcare Science
Personal Care Services
Cosmetology Internship IV

Course Description: This laboratory course provides experiences necessary for the development of skill levels required to become a cosmetologist. This course provides a portion of hours approved by the Georgia State Board of Cosmetology. The tasks specified by this course will allow a student to earn credit hours toward completion of the 1500 hours required by the Georgia State Board of Cosmetology. This course provides more in-depth competencies for the co-curricular student organization SkillsUSA and presents integral components that should be incorporated throughout instructional strategies developed for the course. In addition, this course offers the possibility of meeting articulation alignment with the technical college standards. Topics for this course include: chemical texturing, haircolor and bleaching, skin, scalp, and hair treatments, styling, haircutting, manicuring and pedicuring.

Chemical Texture Services

Students will enhance technical skill for permanent waves, chemical hair relaxers, and soft curl permanents. Student will adhere to state board criteria. Students will work toward mastering the techniques as well as the required

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number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-IV-1. Students will perform hair relaxation and wave formation techniques in accordance with the manufacturers' directions.

- a. Consulting with clients to determine their needs and preferences.
- b. Conducting services in a safe environment, taking measures to prevent the spread of infectious and contagious diseases.

HS-CI-IV-2. Students will demonstrate knowledge of procedural tools and communication/consultation to include client release and record card forms.

- a. Generate questions to provide a client consultation.
- b. Determine if the client is eligible to receive service by analyzing the hair/scalp to identify scalp and hair conditions
- f. Record information on client intake form.

Academic Standard(s):

SCSh3 Students will identify and investigate problems scientifically.

- c. Collect, organize, and record appropriate data.
- e. Develop reasonable conclusions based on data collected.

HS-CI-IV-3. Students will demonstrate knowledge of the product used and its chemistry foundation.

- a. Students demonstrate the knowledge of product used and follow all manufacturers' directions.
- e. Students perform various chemical texturing services based on the needs and preferences of the clients.

HS-CI-IV-4. Students will perform the appropriate number of applications on mannequins/clients, as directed by the instructor, toward completion of State Board requirements.

- a. Perform 9 permanent waving applications.
- b. Perform 4 virgin chemical hair relaxing applications.
- c. Perform 5 retouch chemical hair relaxing applications.
- d. Perform 1 soft curl permanent application.

Academic Standard(s):

SC5 Students will understand that the rate at which a chemical reaction occurs can be affected by changing concentration, temperature, or pressure and the addition of a catalyst.

- a. Demonstrate the effects of changing concentration, temperature, and pressure on chemical reactions.

SC7 Students will characterize the properties that describe solutions and the nature of acids and bases.

- a. Explain the process of dissolving in terms of solute/solvent interactions:
- b. Compare, contrast, and evaluate the nature of acids and bases:
 - Arrhenius, Bronsted-Lowry Acid/Bases
 - Strong vs. weak acids/bases in terms of percent dissociation
 - pH
 - Acid-Base neutralization

Haircoloring and Bleaching

Students will enhance technical skill for haircoloring and bleaching. Services will include temporary, semi-permanent, demi-permanent, and permanent haircolor. Students will perform a variety of highlight services including cap, foil, and freehand techniques. Students will adhere to State Board criteria. Students will work toward

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mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-IV-5. Students will perform the applications of, safety of, and chemistry involved with haircoloring and bleaching agents.

- a. Conduct a color service in accordance with a client's needs or expectations.
- b. Consult with clients to determine their needs and preferences.
- c. Use a variety of salon products while providing client services.
- d. Conduct services in a safe environment by taking measures to prevent the spread of infectious and contagious diseases.

HS-CI-IV-6. Students will perform the appropriate number of color applications on mannequins/clients, as directed by the instructor, toward completion of State Board requirements

- a. Perform 1 application of temporary color.
- b. Perform 1 application of semi/demi color.
- c. Perform 4 applications of permanent color.
- d. Perform 4 applications of retouch permanent color.
- t. Perform 1 application of bleach products.
- u. Perform 2 applications of retouch bleach products.
- v. Perform a lash and brow tint.
- w. Perform 1 foiling technique.
- x. Perform 1 cap technique.

Academic Standard(s):

SCSh4 Students will use tools and instruments for observing, measuring, and manipulating scientific equipment and materials.

SCSh5 Students will demonstrate the computation and estimation skills necessary for analyzing data and developing reasonable scientific explanations.

- g. Consider possible effects of measurement errors on calculations.

SPS6 Students will investigate the properties of solutions.

- a. Describe solutions in terms of
 - solute/solvent
- b. Observe factors affecting the rate a solute dissolves in a specific solvent.

SC5 Students will understand that the rate at which a chemical reaction occurs can be affected by changing concentration, temperature, or pressure and the addition of a catalyst.

- h. Investigate the effects of a catalyst on chemical reactions and apply it to everyday examples.

HS-CI-IV-7. Students will demonstrate knowledge of formulations and various applications.

- a. Identify the client's natural level.
- b. Determine classification of color used.
- c. Apply color/bleach using brush or bottle method with appropriate sectioning.
- d. Determine when to use retouch or virgin procedures for applications.
- e. Determine which foiling technique is to be used (foiling, freehand, cap, etc).
- f. Conduct a predisposition test for possible allergies prior to service.

Academic Standard(s):

SCSh3 Students will identify and investigate problems scientifically.

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- d. Develop reasonable conclusions based on data collected.
- b. Evaluate whether conclusions are reasonable by reviewing the process and checking against other available information.

Skin, Scalp, and Hair Treatments

Students will enhance technical skill for skin, scalp, and hair treatments. Students will adhere to State Board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-IV-8. Students will perform the application techniques and theory in the treatment of the skin, scalp, and hair.

- a. Conduct services in a safe environment and taking measures to prevent the spread of infectious and contagious diseases.
- b. Use a variety of salon products while providing services.
- c. Effectively market professional salon products.

HS-CI-IV-9. Students will follow safety precautions for all skin, scalp, and hair treatments.

- a. Generate questions to perform client consultation and analyze skin, scalp, and hair for disorders prior to performing treatment procedures.
- b. Demonstrate safety precautions for all electrical equipment.

HS-CI-IV-10. Students will identify electrical equipment for scalp and facial treatments.

Academic Standard(s):

SPS7 Students will relate transformations and flow of energy within a system.

HS-CI-IV-11. Students will identify cosmetic chemistry products and supplies used for the face, hair, and scalp.

- j. Identify products and supplies needed to give facial treatments.
- k. Identify products and supplies needed to give scalp treatments.
- l. Identify products and supplies needed to give hair treatments.

Academic Standard(s):

SCSh3 Students will identify and investigate problems scientifically.

- e. Develop reasonable conclusions based on data collected.
- f. Evaluate whether conclusions are reasonable by reviewing the process and checking against other available information.

HS-CI-IV-12. Student will perform corrective hair and scalp treatments.

- g. Demonstrate procedures involved in a corrective scalp treatment for oily and dry scalp.
- h. Demonstrate procedures involved in a corrective hair treatment for dry and oily hair.

HS-CI-IV-13. Students will perform facial procedures.

- a. Demonstrate massage manipulations.
- b. Perform procedures for an oily skin facial.
- c. Perform procedures for a dry skin facial.

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HS-CI-IV-14. Perform the appropriate number of applications on mannequins/clients, as directed by the instructor, toward completion of State Board requirements.

- s. Perform 5 facials.
- t. Perform 5 scalp treatments.
- u. Perform 7 hair treatments.
- v. Perform 4 lip, chin and face hair removal services.
- w. Perform 4 brow tweezing.
- x. Perform 4 brow waxing.

Hair Design

Students will enhance general hair design skills including wet hairstyling, thermal hairstyling and special occasion hairstyling. Students will interpret designs as well as create their own designs. Students will adhere to State Board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-IV-15. Students will provide styling and finishing techniques to complete a hairstyle to the satisfaction of the client.

- j. Consult with the client to determine needs and preferences.
- k. Research the history of hairstyling and how it has evolved to current trends.
- l. Interpret and analyze bone and muscular structure to determine complimentary hairstyles.

HS-CI-IV-16. Students will be able to enhance their skills from previous courses in the fundamental theory and skills required for hairstyling design to a advanced skill level in hairstyling, including: updo's, hair wrapping, thermal hairstyling, roller sets, pincurls, finger waves, chignons, French twist, hair pressing, braiding and hair extensions.

- s. Demonstrate the ability to utilize and control the hairstyle using the design elements and principles within a two- or three-dimensional context.
- t. Interpret a composition analysis of hair design as it relates to balance, contrast, repetition, alternation, and proportional relationships.
- u. Construct a portfolio of hair designs reflecting the history of hairstyling research.
- v. Generate different hairstyles for different body proportions to create a balance hair design.
- w. Demonstrate proper design compositions in hair designs using form, lines, texture, and color as a guide.
- x. Illustrate different designs using design principles including repetition, alternation, progression, contrast, and balance.

HS-CI-IV-17. Students will perform the appropriate number of styles, as directed by the instructor, to meet State Board requirements.

- p. Perform 10 wet sets.
- q. Perform 14 comb outs.
- r. Perform 4 blow dry styles to include Marcel Iron.
- s. Perform 1 pincurl style.
- t. Perform 1 finger wave style.

Hair Cutting

Students will enhance technical skills for haircutting. Students will work with a variety of haircutting tools including shears, razor, thinning shears, and clippers. Students will perform haircuts to client specification. Students will adhere to State Board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

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HS-CI-IV-18. Students will perform haircuts in accordance with a client's needs or expectations.

- a. Introduce theory and skills necessary to apply haircutting techniques.
- b. Consult with clients to determine their needs and preferences.

HS-CI-IV-19. Students will identify terms associated with haircutting.

Academic Standard(s):

ELA10RL5 The student understands and acquires new vocabulary and uses it correctly in reading and writing.

HS-CI-IV-20. Students will follow safety practices and decontamination during haircutting procedures.

- m. Demonstrate knowledge of client protection during service.
- n. Demonstrate safe handling of implements while cutting.
- o. Identify appropriate procedures for storing sanitizing and storing implements.
- p. Demonstrate importance of sterilization and sanitation rules while cutting.

HS-CI-IV-21. Students will perform the appropriate number of haircuts, as directed by the instructor, to meet State Board requirements.

- a. Perform 15 haircutting techniques.

Academic Standards(s):

MM2G1. Students will identify and use special right triangles.

HS-CI-IV-22. Students will perform client consultation.

- g. Analyze client's hair and scalp condition.
- h. Perform a head/hair/body analysis.

Academic Standard(s):

ELA11LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

- a. Initiates new topics in addition to responding to adult-initiated topics.
- b. Asks relevant questions.
- c. Responds to questions with appropriate information.

HS-CI-IV-23. Students will identify cutting implements.

- g. Identify haircutting implements and their functions.
- h. Demonstrate how to hold, use, and care for implements.

HS-CI-IV-24. Students will identify various haircutting techniques.

- s. Demonstrate sectioning in haircutting.
- t. Identify traveling and stationary guidelines.
- u. Demonstrate 0 elevation, 180 degree, 45 degree, and 90 degree cuts.
- v. Demonstrate cuts using shears, razor, and clippers.
- w. Demonstrate various texture techniques in haircutting.
- x. Demonstrate cross-checking a haircut for accuracy.

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Academic Standard(s):

MM1G1. Students will investigate properties of geometric figures in the coordinate

- a. plane.
- b. Determine the distance between two points.
- c. Determine the distance between a point and a line.

MM2G1. Students will identify and use special right triangles.

Nail Care

Students will enhance technical skills for manicuring, pedicuring, and advanced nail procedures. Students will adhere to State Board criteria. Students will work toward mastering techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-IV-25. Students will provide basic manicures and pedicures to the satisfaction of the client.

- a. Consulting with clients to determine their needs and preferences.
- b. Conducting services in a safe environment and take measures to prevent the spread of infectious and contagious diseases.

HS-CI-IV-26. Students will perform the appropriate number of applications, as directed by the instructor, to meet State Board requirements.

- a. Perform 4 manicures.
- b. Perform 2 pedicures.
- c. Perform 1 advanced nail technique.

Reception

Students will perform receptionist duties to acquired hours. Students will take appointments, answer phone, greet clients.

HS-CI-IV-27. Students will perform the required hours, as directed by the instructor, in order to meet State Board requirements.

- a. Perform 9 hours of receptionist duties.

Academic Standard(s):

ELA9LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

- a. Initiates new topics and responds to adult-initiated topics.
- b. Asks relevant questions.
- c. Responds to questions with appropriate information.

Dispensary

Students will work in dispensary in order to fulfill required number of hours needed for State Board. Students will be responsible for mixing color, perms, etc. Students will also disinfect and sanitize used equipment.

HS-CI- IV-28. Students will mix, fill, and dispense products to other students.

- a. Perform 9 hours of dispensary time

Academic Standard(s):

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SCSh2. Students will use standard safety practices for all classroom laboratory and field investigations.

- a. Follow correct procedures for use of scientific apparatus.
- b. Demonstrate appropriate technique in all laboratory situations.
- c. Follow correct protocol for identifying and reporting safety problems and violations.

Reading Across the Curriculum

Reading Standard Comment

After the elementary years, students engage in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts, mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific vocabulary, and for students to excel in all subjects, they must learn the specific vocabulary of those subject areas in context.

Beginning with the middle grades years, students begin to self-select reading materials based on personal interests established through classroom learning. Students become curious about science, mathematics, history, and literature as they form contexts for those subjects related to their personal and classroom experiences. As students explore academic areas through reading, they develop favorite subjects and become confident in their verbal discourse about those subjects.

Reading across curriculum content develops both academic and personal interests in students. As students read, they develop both content and contextual vocabulary. They also build good habits for reading, researching, and learning. The Reading Across the Curriculum standard focuses on the academic and personal skills students acquire as they read in all areas of learning.

Students will enhance reading in all curriculum areas by:

- q. Reading in all curriculum areas
 - Read a minimum of 25 grade-level appropriate books per year from a variety of subject disciplines and participate in discussions related to curricular learning in all areas.
 - Read both informational and fictional texts in a variety of genres and modes of discourse.
 - Read technical texts related to various subject areas.
- r. Discussing books
 - Discuss messages and themes from books in all subject areas.
 - Respond to a variety of texts in multiple modes of discourse.
 - Relate messages and themes from one subject area to messages and themes in another area.
 - Evaluate the merit of texts in every subject discipline.
 - Examine author's purpose in writing.
 - Recognize the features of disciplinary texts.
- s. Building vocabulary knowledge
 - Demonstrate an understanding of contextual vocabulary in various subjects.
 - Use content vocabulary in writing and speaking.
 - Explore understanding of new words found in subject area texts.

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- t. Establishing context
- Explore life experiences related to subject area content.
 - Discuss in both writing and speaking how certain words are subject area related.
 - Determine strategies for finding content and contextual meaning for unknown words.

CTAE Foundation Skills

The Foundation Skills for Career, Technical and Agricultural Education (CTAE) are critical competencies that students pursuing any career pathway should exhibit to be successful. As core standards for all career pathways in all program concentrations, these skills link career, technical and agricultural education to the state's academic performance standards.

The CTAE Foundation Skills are aligned to the foundation of the U. S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by a national advisory group of employers, secondary and postsecondary educators, labor associations, and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy.

CTAE-FS-1 Technical Skills: Learners achieve technical content skills necessary to pursue the full range of careers for all pathways in the program concentration.

CTAE-FS-2 Academic Foundations: Learners achieve state academic standards at or above grade level.

CTAE-FS-3 Communications: Learners use various communication skills in expressing and interpreting information.

CTAE-FS-4 Problem Solving and Critical Thinking: Learners define and solve problems, and use problem-solving and improvement methods and tools.

CTAE-FS-5 Information Technology Applications: Learners use multiple information technology devices to access, organize, process, transmit, and communicate information.

CTAE-FS-6 Systems: Learners understand a variety of organizational structures and functions.

CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.

CTAE-FS-8 Leadership and Teamwork: Learners apply leadership and

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teamwork skills in collaborating with others to accomplish organizational goals and objectives.

CTAE-FS-9 Ethics and Legal Responsibilities: Learners commit to work ethics, behavior, and legal responsibilities in the workplace.

CTAE-FS-10 Career Development: Learners plan and manage academic-career plans and employment relations.

CTAE-FS-11 Entrepreneurship: Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.

PROGRAM CONCENTRATION:

CAREER PATHWAY:

COURSE TITLE:

**Healthcare Science
Personal Care Services
Cosmetology Internship V**

Course Description: This laboratory course provides experiences necessary for the development of skill levels required to become a cosmetologist. This course provides a portion of hours approved by the Georgia State Board of Cosmetology. The tasks specified by this course will allow a student to earn credit hours toward completion of the 1500 hours required by the Georgia State Board of Cosmetology. This course provides more in-depth competencies for the co-curricular student organization SkillsUSA and presents integral components that should be incorporated throughout instructional strategies developed for the course. In addition, this course offers the possibility of meeting articulation alignment with the technical college standards. Topics for this course include: chemical texturing, haircolor and bleaching, skin, scalp, and hair treatments, styling, haircutting, manicuring and pedicuring.

Chemical Texture Services

Students will enhance technical skill for permanent waves, chemical hair relaxers, and soft curl permanents. Student will adhere to state board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-V-1. Students will perform hair relaxation and wave formation techniques in accordance with the manufacturers' directions.

- a. Consulting with clients to determine their needs and preferences.
- b. Conducting services in a safe environment, taking measures to prevent the spread of infectious and contagious diseases.

HS-CI-V-2. Students will demonstrate knowledge of procedural tools and communication/consultation to include client release and record card forms.

- a. Generate questions to provide a client consultation.
- b. Determine if the client is eligible to receive service by analyzing the hair/scalp to identify scalp and hair conditions
- g. Record information on client intake form.

Academic Standard(s):

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SCSh3 Students will identify and investigate problems scientifically.

- c. Collect, organize, and record appropriate data.
- e. Develop reasonable conclusions based on data collected.

HS-CI-V-3. Students will demonstrate knowledge of the product used and its chemistry foundation.

- a. Students demonstrate the knowledge of product used and follow all manufacturers' directions.
- b. Students perform various chemical texturing services based on the needs and preferences of the clients.

HS-CI-V-4. Students will perform the appropriate number of applications on mannequins/clients, as directed by the instructor, toward completion of State Board requirements.

- a. Perform 9 permanent waving applications.
- b. Perform 4 virgin chemical hair relaxing applications.
- c. Perform 5 retouch chemical hair relaxing applications.
- d. Perform 1 soft curl permanent application.

Academic Standard(s):

SC5 Students will understand that the rate at which a chemical reaction occurs can be affected by changing concentration, temperature, or pressure and the addition of a catalyst.

- a. Demonstrate the effects of changing concentration, temperature, and pressure on chemical reactions.

SC7 Students will characterize the properties that describe solutions and the nature of acids and bases.

- a. Explain the process of dissolving in terms of solute/solvent interactions:
- b. Compare, contrast, and evaluate the nature of acids and bases:
 - Arrhenius, Bronsted-Lowry Acid/Bases
 - Strong vs. weak acids/bases in terms of percent dissociation
 - pH
 - Acid-Base neutralization

Haircoloring and Bleaching

Students will enhance technical skill for haircoloring and bleaching. Services will include temporary, semi-permanent, demi-permanent, and permanent haircolor. Students will perform a variety of highlight services including cap, foil, and freehand techniques. Students will adhere to State Board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-V-5. Students will perform the applications of, safety of, and chemistry involved with haircoloring and bleaching agents.

- a. Conduct a color service in accordance with a client's needs or expectations.
- b. Consult with clients to determine their needs and preferences.
- c. Use a variety of salon products while providing client services.
- d. Conduct services in a safe environment by taking measures to prevent the spread of infectious and contagious diseases.

HS-CI-V-6. Students will perform the appropriate number of color applications on mannequins/clients, as directed by the instructor, toward completion of State Board requirements

- a. Perform 1 application of temporary color.
- b. Perform 1 application of semi/demi color.
- c. Perform 4 applications of permanent color.

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- d. Perform 4 applications of retouch permanent color.
- y. Perform 1 application of bleach products.
- z. Perform 2 applications of retouch bleach products.
- aa. Perform a lash and brow tint.
- bb. Perform 1 foiling technique.
- cc. Perform 1 cap technique.

Academic Standard(s):

SCSh4 Students will use tools and instruments for observing, measuring, and manipulating scientific equipment and materials.

SCSh5 Students will demonstrate the computation and estimation skills necessary for analyzing data and developing reasonable scientific explanations.

- i. Consider possible effects of measurement errors on calculations.

SPS6 Students will investigate the properties of solutions.

- a. Describe solutions in terms of
 - solute/solvent
- b. Observe factors affecting the rate a solute dissolves in a specific solvent.

SC5 Students will understand that the rate at which a chemical reaction occurs can be affected by changing concentration, temperature, or pressure and the addition of a catalyst.

- j. Investigate the effects of a catalyst on chemical reactions and apply it to everyday examples.

HS-CI-V-7. Students will demonstrate knowledge of formulations and various applications.

- a. Identify the client's natural level.
- b. Determine classification of color used.
- c. Apply color/bleach using brush or bottle method with appropriate sectioning.
- d. Determine when to use retouch or virgin procedures for applications.
- e. Determine which foiling technique is to be used (foiling, freehand, cap, etc).
- f. Conduct a predisposition test for possible allergies prior to service.

Academic Standard(s):

SCSh3 Students will identify and investigate problems scientifically.

- e. Develop reasonable conclusions based on data collected.
- b. Evaluate whether conclusions are reasonable by reviewing the process and checking against other available information.

Skin, Scalp, and Hair Treatments

Students will enhance technical skill for skin, scalp, and hair treatments. Students will adhere to State Board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-V-8. Students will perform the application techniques and theory in the treatment of the skin, scalp, and hair.

- a. Conduct services in a safe environment and taking measures to prevent the spread of infectious and contagious diseases.
- b. Use a variety of salon products while providing services.
- c. Effectively market professional salon products.

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HS-CI-V-9. Students will follow safety precautions for all skin, scalp, and hair treatments.

- a. Generate questions to perform client consultation and analyze skin, scalp, and hair for disorders prior to performing treatment procedures.
- b. Demonstrate safety precautions for all electrical equipment.

HS-CI-V-10. Students will identify electrical equipment for scalp and facial treatments.

Academic Standard(s):

SPS7 Students will relate transformations and flow of energy within a system.

HS-CI-V-11. Students will identify cosmetic chemistry products and supplies used for the face, hair, and scalp.

- m. Identify products and supplies needed to give facial treatments.
- n. Identify products and supplies needed to give scalp treatments.
- o. Identify products and supplies needed to give hair treatments.

Academic Standard(s):

SCSh3 Students will identify and investigate problems scientifically.

- e. Develop reasonable conclusions based on data collected.
- f. Evaluate whether conclusions are reasonable by reviewing the process and checking against other available information.

HS-CI-V-12. Student will perform corrective hair and scalp treatments.

- i. Demonstrate procedures involved in a corrective scalp treatment for oily and dry scalp.
- j. Demonstrate procedures involved in a corrective hair treatment for dry and oily hair.

HS-CI-V-13. Students will perform facial procedures.

- a. Demonstrate massage manipulations.
- b. Perform procedures for an oily skin facial.
- c. Perform procedures for a dry skin facial.

HS-CI-V-14. Perform the appropriate number of applications on mannequins/clients, as directed by the instructor, toward completion of State Board requirements.

- y. Perform 5 facials.
- z. Perform 5 scalp treatments.
- aa. Perform 7 hair treatments.
- bb. Perform 4 lip, chin and face hair removal services.
- cc. Perform 4 brow tweezing.
- dd. Perform 4 brow waxing.

Hair Design

Students will enhance general hair design skills including wet hairstyling, thermal hairstyling and special occasion hairstyling. Students will interpret designs as well as create their own designs. Students will adhere to State Board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

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HS-CI-V-15. Students will provide styling and finishing techniques to complete a hairstyle to the satisfaction of the client.

- m. Consult with the client to determine needs and preferences.
- n. Research the history of hairstyling and how it has evolved to current trends.
- o. Interpret and analyze bone and muscular structure to determine complimentary hairstyles.

HS-CI-V-16. Students will be able to enhance their skills from previous courses in the fundamental theory and skills required for hairstyling design to a advanced skill level in hairstyling, including: updo's, hair wrapping, thermal hairstyling, roller sets, pincurls, finger waves, chignons, French twist, hair pressing, braiding and hair extensions.

- y. Demonstrate the ability to utilize and control the hairstyle using the design elements and principles within a two- or three-dimensional context.
- z. Interpret a composition analysis of hair design as it relates to balance, contrast, repetition, alternation, and proportional relationships.
- aa. Construct a portfolio of hair designs reflecting the history of hairstyling research.
- bb. Generate different hairstyles for different body proportions to create a balance hair design.
- cc. Demonstrate proper design compositions in hair designs using form, lines, texture, and color as a guide.
- dd. Illustrate different designs using design principles including repetition, alternation, progression, contrast, and balance.

HS-CI-V-17. Students will perform the appropriate number of styles, as directed by the instructor, to meet State Board requirements.

- u. Perform 10 wet sets.
- v. Perform 14 comb outs.
- w. Perform 4 blow dry styles to include Marcel Iron.
- x. Perform 1 pincurl style.
- y. Perform 1 finger wave style.

Hair Cutting

Students will enhance technical skills for haircutting. Students will work with a variety of haircutting tools including shears, razor, thinning shears, and clippers. Students will perform haircuts to client specification. Students will adhere to State Board criteria. Students will work toward mastering the techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

HS-CI-V-18. Students will perform haircuts in accordance with a client's needs or expectations.

- a. Introduce theory and skills necessary to apply haircutting techniques.
- b. Consult with clients to determine their needs and preferences.

HS-CI-V-19. Students will identify terms associated with haircutting.

Academic Standard(s):

ELA10RL5 The student understands and acquires new vocabulary and uses it correctly in reading and writing.

HS-CI-V-20. Students will follow safety practices and decontamination during haircutting procedures.

- q. Demonstrate knowledge of client protection during service.
- r. Demonstrate safe handling of implements while cutting.

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- s. Identify appropriate procedures for storing sanitizing and storing implements.
- t. Demonstrate importance of sterilization and sanitation rules while cutting.

HS-CI-V-21. Students will perform the appropriate number of haircuts, as directed by the instructor, to meet State Board requirements.

- a. Perform 15 haircutting techniques.

Academic Standard(s):

MM2G1. Students will identify and use special right triangles.

HS-CI-V-22. Students will perform client consultation.

- i. Analyze client's hair and scalp condition.
- j. Perform a head/hair/body analysis.

Academic Standard(s):

ELA11LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

- a. Initiates new topics in addition to responding to adult-initiated topics.
- b. Asks relevant questions.
- c. Responds to questions with appropriate information.

HS-CI-V-23. Students will identify cutting implements.

- i. Identify haircutting implements and their functions.
- j. Demonstrate how to hold, use, and care for implements.

HS-CI-V-24. Students will identify various haircutting techniques.

- y. Demonstrate sectioning in haircutting.
- z. Identify traveling and stationary guidelines.
- aa. Demonstrate 0 elevation, 180 degree, 45 degree, and 90 degree cuts.
- bb. Demonstrate cuts using shears, razor, and clippers.
- cc. Demonstrate various texture techniques in haircutting.
- dd. Demonstrate cross-checking a haircut for accuracy.

Academic Standard(s):

MM1G1. Students will investigate properties of geometric figures in the coordinate

- a. plane.
- b. Determine the distance between two points.
- c. Determine the distance between a point and a line.

MM2G1. Students will identify and use special right triangles.

Nail Care

Students will enhance technical skills for manicuring, pedicuring, and advanced nail procedures. Students will adhere to State Board criteria. Students will work toward mastering techniques as well as the required number of hours for a Master Cosmetologist License under the Georgia State Board of Cosmetology.

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HS-CI-V-25. Students will provide basic manicures and pedicures to the satisfaction of the client.

- a. Consulting with clients to determine their needs and preferences.
- b. Conducting services in a safe environment and take measures to prevent the spread of infectious and contagious diseases.

HS-CI-V-26. Students will perform the appropriate number of applications, as directed by the instructor, to meet State Board requirements.

- a. Perform 4 manicures.
- b. Perform 2 pedicures.
- c. Perform 1 advanced nail technique.

Reception

Students will perform receptionist duties to acquired hours. Students will take appointments, answer phone, greet clients.

HS-CI-V-27. Students will perform the required hours, as directed by the instructor, in order to meet State Board requirements.

- a. Perform 9 hours of receptionist duties.

Academic Standard(s):

ELA9LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

- a. Initiates new topics and responds to adult-initiated topics.
- b. Asks relevant questions.
- c. Responds to questions with appropriate information.

Dispensary

Students will work in dispensary in order to fulfill required number of hours needed for State Board. Students will be responsible for mixing color, perms, etc. Students will also disinfect and sanitize used equipment.

HS-CI-V-28. Students will mix, fill, and dispense products to other students.

- a. Perform 9 hours of dispensary time

Academic Standard(s):

SCSh2. Students will use standard safety practices for all classroom laboratory and field investigations.

- a. Follow correct procedures for use of scientific apparatus.
- b. Demonstrate appropriate technique in all laboratory situations.
- c. Follow correct protocol for identifying and reporting safety problems and violations.

Reading Across the Curriculum

Reading Standard Comment

After the elementary years, students engage in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts, mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific

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vocabulary, and for students to excel in all subjects, they must learn the specific vocabulary of those subject areas in context.

Beginning with the middle grades years, students begin to self-select reading materials based on personal interests established through classroom learning. Students become curious about science, mathematics, history, and literature as they form contexts for those subjects related to their personal and classroom experiences. As students explore academic areas through reading, they develop favorite subjects and become confident in their verbal discourse about those subjects.

Reading across curriculum content develops both academic and personal interests in students. As students read, they develop both content and contextual vocabulary. They also build good habits for reading, researching, and learning. The Reading Across the Curriculum standard focuses on the academic and personal skills students acquire as they read in all areas of learning.

Students will enhance reading in all curriculum areas by:

- s. Reading in all curriculum areas
 - Read a minimum of 25 grade-level appropriate books per year from a variety of subject disciplines and participate in discussions related to curricular learning in all areas.
 - Read both informational and fictional texts in a variety of genres and modes of discourse.
 - Read technical texts related to various subject areas.
- t. Discussing books
 - Discuss messages and themes from books in all subject areas.
 - Respond to a variety of texts in multiple modes of discourse.
 - Relate messages and themes from one subject area to messages and themes in another area.
 - Evaluate the merit of texts in every subject discipline.
 - Examine author's purpose in writing.
 - Recognize the features of disciplinary texts.
- u. Building vocabulary knowledge
 - Demonstrate an understanding of contextual vocabulary in various subjects.
 - Use content vocabulary in writing and speaking.
 - Explore understanding of new words found in subject area texts.
- v. Establishing context
 - Explore life experiences related to subject area content.
 - Discuss in both writing and speaking how certain words are subject area related.
 - Determine strategies for finding content and contextual meaning for unknown words.

CTAE Foundation Skills

The Foundation Skills for Career, Technical and Agricultural Education (CTAE) are critical competencies that students pursuing any career pathway should exhibit to be successful. As core standards for all career pathways in all program concentrations, these skills link career, technical and agricultural education to the state's academic performance standards.

The CTAE Foundation Skills are aligned to the foundation of the U. S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association

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of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by a national advisory group of employers, secondary and postsecondary educators, labor associations, and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy.

CTAE-FS-1 Technical Skills: Learners achieve technical content skills necessary to pursue the full range of careers for all pathways in the program concentration.

CTAE-FS-2 Academic Foundations: Learners achieve state academic standards at or above grade level.

CTAE-FS-3 Communications: Learners use various communication skills in expressing and interpreting information.

CTAE-FS-4 Problem Solving and Critical Thinking: Learners define and solve problems, and use problem-solving and improvement methods and tools.

CTAE-FS-5 Information Technology Applications: Learners use multiple information technology devices to access, organize, process, transmit, and communicate information.

CTAE-FS-6 Systems: Learners understand a variety of organizational structures and functions.

CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.

CTAE-FS-8 Leadership and Teamwork: Learners apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

CTAE-FS-9 Ethics and Legal Responsibilities: Learners commit to work ethics, behavior, and legal responsibilities in the workplace.

CTAE-FS-10 Career Development: Learners plan and manage academic-career plans and employment relations.

CTAE-FS-11 Entrepreneurship: Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.

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PROGRAM CONCENTRATION:

Healthcare Science

CAREER PATHWAY:

Personal Care Services

COURSE TITLE:

Licensure and Employment Opportunities

Course Description: This laboratory course provides experiences necessary for the development of skill levels required to become a cosmetologist. This course provides a portion of hours approved by the Georgia State Board of Cosmetology. The tasks specified by this course will allow a student to earn credit hours towards completion of the 1500 hours required by the Georgia State Board of Cosmetology. This course provides more in-depth competencies for the co-curricular student organization SkillsUSA and presents integral components that should be incorporated throughout instructional strategies developed for the course. In addition, this course offers the possibility of meeting articulation alignment with the technical college standards. Topics for this course include industry concepts, surviving in the salon, and licensure preparation.

Employment Opportunities

Students will become familiar with industry concepts and procedures involved with successfully operating a salon. The steps involved in opening and operating a privately owned salon or barber/styling shop will be emphasized. Topics include: planning a salon, business management, retailing, public relations, sales skills, career development, and client retention.

HS-LEO-I-1. Students will be able to describe industry concepts as they apply to salon operations.

- a. Demonstrate product knowledge by identifying products and supplies used in salons today.
- b. Evaluate the daily operations of a salon.
- c. Demonstrate knowledge of business management skills to operate a salon.
- d. Demonstrate computer knowledge in salon operations through usage of computers for salon inventory, client records, and managing appointment scheduling.

Academic Standard(s):

MA1P5. Students will represent mathematics in multiple ways.

- b. Select, apply, and translate among mathematical representations to solve problem
- c. Use representations to model and interpret physical, social, and mathematical phenomena

SSEM2. The student will explain how the Law of Demand, the Law of Supply, prices, and profits work to determine production and distribution in a market economy.

- d. Explain how prices serve as incentives in a market economy.

HS-LEO-I-2. Students will be able to describe the process involved in the transitioning from school to salon.

- a. List current up to date local and state laws governing the cosmetology profession.
- b. Demonstrate knowledge of OSHA and applicable laws in the salon.
- c. Identify methods of controlling infectious substances in the salon.
- d. Observe everyday operations in the salon.
- e. Identify strategies needed to maintain a clientele.
- f. Demonstrate salon safety.

Salon Business

Students will be introduced to factors to consider when opening a salon. Salon business will include; financial plan, compliance with business laws, marketing research for salon location, salon layout, types of ownership, record

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keeping, business operations, customer relations, advertising, retail and general management.

HS-LEO-I-3. Students will be able to describe the process involved with planning a salon.

- a. List areas in which a person must be knowledgeable to plan a salon.
- b. Identify things that must be considered in location selection.
- c. Illustrate physical layout for all salon types.
- d. Observe compliance with state, county, and city laws.

HS-LEO-I-4. Students will be able to describe business management in planning a salon.

- a. List and describe the various types of salon ownerships.
- b. Describe record keeping procedures such as: payroll, types of taxes, inventory control, client intake cards, and other pertinent records involved with daily salon operations.
- c. Describe retail procedures involved with daily salon operations such as: ordering, organization of stock area, and how to complete a supply order.
- d. Identify procedures for selling retail.
- e. Demonstrate educating client on retail needs.
- f. Create and describe how to assemble a retail display.

Academic Standard(s):

MM1P4. Students will make connections among mathematical ideas and to other disciplines.

- a. Recognize and use connections among mathematical ideas.
- c. Recognize and apply mathematics outside the usual contexts.

SSEMI4. The student will explain the organization and role of business and analyze the four types of market structures in the U.S. economy.

- a. Compare and contrast three forms of business organization—sole proprietorship, partnership and corporation.
- b. Explain the role of profit as an incentive for entrepreneurs.

HS-LEO-I-5. Student will be able to describe in-shop public relations.

- a. Demonstrate professional telephone techniques.
- b. Operate appointment desk.
- c. Maintain reception area.
- d. Manage monies for services in the salon.
- e. Resolve customer complaints.
- f. Supervise personal and public sanitation.
- g. Prepare advertisements for the salon.

Academic Standard(s):

ELA11LSV1 The student participates in student-to-teacher, student-to-student, and group verbal interactions. The student

- b. Asks relevant questions.
- c. Responds to questions with appropriate information.
- i. Employ group decision-making techniques such as brainstorming or a problem solving sequence (i.e., recognizes problem, defines problem, identifies possible solutions, selects optimal solution, implements solution, evaluates solution).
- j. Divides labor so as to achieve the overall group goal efficiently.

MM1P1. Students will solve problems (using appropriate technology).

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- b. Solve problems that arise in mathematics and in other contexts.
- c. Apply and adapt a variety of appropriate strategies to solve problems.

MM1P4. Students will make connections among mathematical ideas and to other disciplines.

- a. Recognize and use connections among mathematical ideas.

HS-LEO-I-6. Student will be able to describe client retention and various techniques to maintain clientele.

- a. Demonstrate how to schedule/re-schedule client appointments.
- b. Demonstrate how to perform client consultation.
- c. Maintain client intake cards.
- d. Resolve any customer complaints.
- e. Greet clients properly and professionally.

Academic Standard(s):

ELA11LSV1. The student participates in student-to-teacher, student-to-student, and verbal interactions. The student

- c. Responds to questions with appropriate information.
- g. Gives reasons in support of opinions expressed.
- h. Clarifies, illustrates, or expands on a response when asked to do so; asks classmates for similar expansions.
- j. Divides labor so as to achieve the overall group goal efficiently.

SCSh3. Students will identify and investigate problems scientifically.

- c. Collect, organize and record appropriate data.
- e. Develop reasonable conclusions based on data collected.

Licensure Preparation

Student will be able to perform both the written and practical portion of the licensure examination. The examination consists of a written test which is based upon: scientific concepts, hair care and services, skin care and services, and nail care and services. The practical examination consists of safety and infection control throughout the exam, general setup, client protection, thermal curling, haircutting, permanent waving, chemical hair relaxing, haircolor/bleach techniques, mock facial, and sculptured nail application.

HS-LEO-I-7. Student will be able to describe requirements needed to take licensure test.

- a. Describe hour/school requirements needed to take exam.
- b. Describe fees required to take exam.
- c. Describe documents needed to submit with application.
- d. Follow all safety and infection control guidelines while performing this section of the examination.

HS-LEO-I-8. Student will be able to demonstrate the general set up and client protection for the practical examination following all safety and infection control procedures throughout the exam.

- a. List items needed for general setup for the exam.
- b. Perform proper draping application of mannequin to show client protection.
- c. Determine proper packing and labeling techniques for preparation.
- d. Follow all safety and infection control guidelines while performing this section of the examination.

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SCSh2. Students will use standard safety practices for all classroom laboratory and field investigations.

- b. Demonstrate appropriate techniques in all laboratory situations.
- c. Follow correct protocol for identifying and reporting safety problems and violations.

HS-LEO-I-9. Student will be able to demonstrate the thermal curling section of the exam.

- a. Demonstrate ability to follow instructions.
- b. Demonstrate testing the iron before insertion into the hair.
- c. Demonstrate proper manipulation of iron.
- d. Demonstrate the ability to create a full curl.
- e. Follow all safety and infection control guidelines while performing this section of the examination.

HS-LEO-I-10. Student will be able to demonstrate the haircutting section of the exam.

- a. Demonstrate the ability to follow instructions.
- b. Demonstrate proper saturation of hair.
- c. Demonstrate proper sectioning of hair.
- d. Demonstrate how to establish a guide.
- e. Demonstrate proper handling of shears, razor, and comb.
- f. Follow all safety and infection control guidelines while performing this section of the examination.

HS-LEO-I-11. Student will be able to demonstrate the permanent waving section of the exam.

- a. Demonstrate the ability to follow directions.
- b. Demonstrate proper saturation of hair.
- c. Demonstrate proper rod selection.
- d. Demonstrate how to protect the ends of the hair using protective end papers.
- e. Demonstrate the proper base control for the permanent wave procedure.
- f. Demonstrate how to protect the client's skin using protective cream and cotton.
- g. Demonstrate the use of protective gloves to protect hands.
- g. Demonstrate saturation with mock waving lotion.
- h. Perform test curl as instructed.
- i. Follow all safety and infection control guidelines while performing this section of the examination.

HS-LEO-I-12. Student will be able to demonstrate the virgin lightener and color retouch application of the exam.

- a. Demonstrate the ability to follow directions.
- b. Demonstrate protection of skin using protective cream.
- c. Demonstrate the removal of lightener and color from their container using a spatula.
- d. Demonstrate the use of protective gloves to protect hands.
- e. Demonstrate proper application techniques for each procedure.
- f. Follow all safety and infection control guidelines while performing this section of the examination.

HS-LEO-I-13. Student will be able to demonstrate the virgin chemical relaxer and retouch applications for the chemical relaxing portion of the exam.

- a. Demonstrate the ability to follow directions.
- b. Demonstrate protection of skin using protective cream.
- c. Demonstrate the removal of relaxer from container using a spatula.
- d. Demonstrate the use of protective gloves to protect hands.

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- e. Demonstrate proper application techniques for each procedure.
- f. Demonstrate smoothing relaxer retouch as instructed.
- g. Follow all safety and infection control guidelines while performing this section of the examination.

HS-LEO-I-14. Student will be able to demonstrate the plain facial procedure for the exam.

- a. Demonstrate the ability to follow directions.
- b. Demonstrate client protection using turban/towel.
- c. Demonstrate proper cleansing technique.
- d. Demonstrate removal of cleanser.
- e. Demonstrate application of massage cream.
- f. Demonstrate massage techniques from insertion to origin.
- g. Demonstrate removal of massage cream.
- h. Demonstrate application of toner to complete facial.
- i. Follow all safety and infection control guidelines while performing this section of the examination.

HS-LEO-I-15. Student will be able to demonstrate the application of the sculptured nail portion of the exam.

- a. Demonstrate the ability to follow directions.
- b. Perform set up using sanitation and proper organization.
- c. Perform client and stylist sanitation procedures.
- d. Prepare cuticle area.
- e. Remove shine from nail plate.
- f. Cleanse nail plate and cuticle area.
- g. Demonstrate application of a nail form.
- h. Demonstrate application of primer without contacting surrounding skin.
- i. Apply product in appropriate manner.
- j. Demonstrate filing in a safe manner.
- k. Display final appearance of nail.
- l. Demonstrate disposal of soiled materials.
- m. Follow all safety and infection control guidelines while performing this section of the examination.

Reading Across the Curriculum

Reading Standard Comment

After the elementary years, students engage in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts, mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific vocabulary, and for students to excel in all subjects, they must learn the specific vocabulary of those subject areas in context.

Beginning with the middle grades years, students begin to self-select reading materials based on personal interests established through classroom learning. Students become curious about science, mathematics, history, and literature as they form contexts for those subjects related to their personal and classroom experiences. As students explore academic areas through reading, they develop favorite subjects and become confident in their verbal discourse about those subjects.

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Reading across curriculum content develops both academic and personal interests in students. As students read, they develop both content and contextual vocabulary. They also build good habits for reading, researching, and learning. The Reading Across the Curriculum standard focuses on the academic and personal skills students acquire as they read in all areas of learning.

Students will enhance reading in all curriculum areas by:

- u. Reading in all curriculum areas
 - Read a minimum of 25 grade-level appropriate books per year from a variety of subject disciplines and participate in discussions related to curricular learning in all areas.
 - Read both informational and fictional texts in a variety of genres and modes of discourse.
 - Read technical texts related to various subject areas.
- v. Discussing books
 - Discuss messages and themes from books in all subject areas.
 - Respond to a variety of texts in multiple modes of discourse.
 - Relate messages and themes from one subject area to messages and themes in another area.
 - Evaluate the merit of texts in every subject discipline.
 - Examine author's purpose in writing.
 - Recognize the features of disciplinary texts.
- w. Building vocabulary knowledge
 - Demonstrate an understanding of contextual vocabulary in various subjects.
 - Use content vocabulary in writing and speaking.
 - Explore understanding of new words found in subject area texts.
- x. Establishing context
 - Explore life experiences related to subject area content.
 - Discuss in both writing and speaking how certain words are subject area related.
 - Determine strategies for finding content and contextual meaning for unknown words.

CTAE Foundation Skills

The Foundation Skills for Career, Technical and Agricultural Education (CTAE) are critical competencies that students pursuing any career pathway should exhibit to be successful. As core standards for all career pathways in all program concentrations, these skills link career, technical and agricultural education to the state's academic performance standards.

The CTAE Foundation Skills are aligned to the foundation of the U. S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by a national advisory group of employers, secondary and postsecondary educators, labor associations, and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy.

CTAE-FS-1 Technical Skills: Learners achieve technical content skills necessary to pursue the full range of careers for all

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pathways in the program concentration.

CTAE-FS-2 Academic Foundations: Learners achieve state academic standards at or above grade level.

CTAE-FS-3 Communications: Learners use various communication skills in expressing and interpreting information.

CTAE-FS-4 Problem Solving and Critical Thinking: Learners define and solve problems, and use problem-solving and improvement methods and tools.

CTAE-FS-5 Information Technology Applications: Learners use multiple information technology devices to access, organize, process, transmit, and communicate information.

CTAE-FS-6 Systems: Learners understand a variety of organizational structures and functions.

CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.

CTAE-FS-8 Leadership and Teamwork: Learners apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

CTAE-FS-9 Ethics and Legal Responsibilities: Learners commit to work ethics, behavior, and legal responsibilities in the workplace.

CTAE-FS-10 Career Development: Learners plan and manage academic-career plans and employment relations.

CTAE-FS-11 Entrepreneurship: Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.

PROGRAM CONCENTRATION:

CAREER PATHWAY:

COURSE TITLE:

**Healthcare Science
Personal Care Services
Science of Advanced Skincare**

Course Description: This course will enhance the students skills in the skincare\personal care field Students will be introduced to the different career opportunities working with plastic

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surgeons, dermatologists, medical spas, salons and internal medicine physicians. A solid foundation of the skin and how it functions is covered. Medical terminology will be used to aid the students in working with medical professionals and their clients. Students are required to meet both national and intrastate professional guidelines as designated by applicable regulatory agencies, including, the Occupational Health and Safety Administration (OSHA) and Center of Disease Control (CDC). Mastery of these standards through project based learning, technical skills practice, and leadership development activities will be the focus of this course. This advanced skincare course will provide students with a competitive edge for either entry into the healthcare\skincare marketplace and\or the post-secondary institution of their choice to continue their education and training. This course is considered broad based with high impact and is a prerequisite for all esthetician\ medical skincare courses.

Anatomy and Physiology of the Skin

Students will understand how physiology and histology are directly linked to facials and treatments of the skin. Students will study the functions of the skin and the roles of collagen and elastin. Aging of skin and how to slow the nature process will be explored.

HS-SAC-1. Students will be able to understand the physiology and histology of the skin. A better understanding of the skin and its functions increases the professionalism of the esthetician\cosmetologist. This unit will cover the layers of the skin, functions, the role of collagen and elastin, melanocytes, aging and how the skin is affected by free radicals. Students will understand how to protect the skin from harsh environments and aging.

- a. Define the functions of the skin
- b. Describe the layers of the skin
- c. Compare and contrast the role of collagen and elastin in the skin
- d. Discriminate between how melanocytes affect skin color and their activity
- e. Explain the glands of the skin
- f. Diagram the causes of intrinsic and extrinsic aging
- g. Describe free radicals and how they affect the skin

Academic Standard (s):

SCSh1. Students will evaluate the importance of curiosity, honesty, openness and skepticism in science.

- a. Exhibit the above traits in their own scientific activities.
- b. Recognize that different explanations often can be given for the same evidence.

SAP1. Students will analyze anatomical structures in relationship to their physiological functions.

- a. Apply terminology when explaining the orientation of body parts and regions.

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- b. Investigate the interdependence of the various body systems to each other and to the body as a whole.
- c. Describe how structure and functions are related in terms of cell and tissue types.

Chemistry

Students will understand chemistry and the how matter changes from one state to another. This unit will cover pure substances and physical mixtures, solutions, suspensions, emulsions, pH scale, and oxidation-reduction reactions.

HS-SAC-2. Students will be able to understand Chemistry. The student will have knowledge of matter and its structures. Chemistry explains the properties of skincare products and ingredients. Selecting the correct products for the client and understanding why they work on the skin is the basics of chemistry.

- a. Define organic and inorganic chemistry.
- b. Explain the structure of matter.
- c. Compare and contrast solutions, suspensions, and emulsions.
- d. Demonstrate how to measure products with a pH scale, pencil or paper.
- e. Describe how alkaline, acid and the pH scale aids in proper selection.

Academic Standard(s)

SC7 Students will characterize the properties that describe solutions and the nature of acids and bases.

- a. Explain the process of dissolving in terms of solute/solvent interactions:
Observe factors that affect the rate at which a solute dissolves in a specific solvent
- b. Compare, contrast, and evaluate the nature of acids and bases:
pH
Acid-Base neutralization

Active Ingredients and Product Selection

Students will distinguish between active ingredients in products and proper selection. This unit will assist students in understanding FDA regulations, MSDS reports and how to select the proper products for clients during skincare treatments.

HS-SAC-3. Students will be able to have a better knowledge of skincare ingredients. Educating the client about correct product selection for their particular skin type and condition is important to improve the overall health of the skin. This class will focus on the importance of FDA regulations regarding cosmetic claims and product safety.

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- a. Define active ingredients in products.
- b. Explain the importance of FDA regulations.
- c. Select products for use during facials.
- d. Describe the function of MSDS reports.
- e. Recommend homecare products for different skin types.

Academic Standard (s):

SPS6 Students will investigate the properties of solutions.

- a. Describe solutions in terms of:
solute/solvent
conductivity
concentration
- b. Observe factors affecting the rate a solute dissolves in a specific solvent.
- c. Demonstrate that solubility is related to temperature by constructing a solubility curve.
- d. Compare and contrast the components and properties of acids and bases.
- e. Determine whether common household substances are acidic, basic, or neutral.

Diseases and Disorders of the Skin

Students will understand diseases and disorders of the skin. The students will learn when to decline a service due to signs of infections or possible contagious diseases. Disorders of the skin will be covered, along with possible treatments. Skin cancers, their causes and ways to reduce risk will be explored.

HS-SAC-4. Students will be able to recognize diseases and disorders of the skin. Client and technician safety will be of at most concern. The students will have a thorough understanding and working knowledge of skin diseases and disorders. Students will learn how to make informed decisions about which clients are candidates for skincare services and which clients need to be referred to a physician for further diagnosis and treatment. The students will only perform services on intact skin and nails.

- a. Describe skin diseases and disorders of the skin.
- b. Define skin lesions.
- c. Recognize contagious diseases needing referral to a physician.
- d. Distinguish between the three basic skin cancers.
- e. Define acne grades 1-111.
- f. Explain cystic acne.

Academic Standard(s):

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SAP4 Students will analyze the physical, chemical, and biological properties of process systems as these relate to transportation, absorption and excretion. This includes the cardiovascular, respiratory, digestive, excretory and immune systems.

- d. Examine various conditions that change normal body functions (e.g. tissue rejection, allergies, injury, diseases and disorders) and how the body responds.
- e. Describe the effects of aging on body systems.

Basic Facials

Students will perform advanced facial treatments. Students will aid in improving the overall health and appearance of the skin. Client consultations, including medical history, contraindications, and client's areas of concern will be addressed. Exfoliation and extractions will be performed. Students will follow protocols for facials, sanitation and safety.

HS-SAC-5. Students will be able to perform a basic facial treatment. A facial treatment improves the overall health and appearance of the skin. The client will notice improvements to their skin's texture and tone while experiencing relaxation.

- a. Review client's medical history.
- b. Complete intake forms and informed consents.
- c. Follow-up on any contraindications.
- d. Select products needed and used during the facial.
- e. Perform facial protocols.
- f. Demonstrate sanitation and safety procedures at all times.
- g. Demonstrate exfoliation techniques (mechanical and chemical).
- h. Perform extractions using proper methods.
- i. Recommend homecare products.

Academic Standard(s):

SCSh3. Students will identify and investigate problems scientifically.

- a. Suggest reasonable hypotheses for identified problems.
- b. Develop procedures for solving scientific problems.
- c. Collect, organize and record appropriate data.
- d. Graphically compare and analyze data points and/or summary statistics.
- e. Develop reasonable conclusions based on data collected.
- f. Evaluate whether conclusions are reasonable by reviewing the process and checking against other available information.

Facial Massage

Students will increase their skill level in the five basic massage movements used in facials. Understanding of their benefits will be covered.

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HS-SAC-6. Students will be able to perform a facial massage. Massage is the first form of medicine. The five basic massage movements are utilized, including Effleurage, Petrissage, Vibration, Friction and Tapotement. Students will use massage movements to stimulate and relax the muscles.

- a. Explain the benefits of massage.
- b. Describe possible contraindications.
- c. Define the muscles of the face and neck
- d. Perform massage techniques and proper application.

Academic Standard(s):

SCSh8. Students will understand important features of the process of scientific inquiry.

Students will apply the following to inquiry based learning practices:

- a. Scientific investigators control the conditions of their experiments in order to produce valuable data.
- d. The merit of a new theory is judged by how well scientific data are explained by the new theory.

Facial Preparations

HS-SAC-7. Students will be able to set up a treatment room to perform a facial treatment. Students will perform their work in a clean, safe work environment. The students will understand the importance of the client's experience in the spa and how it is dictated by preparation, work ethic and the skill of the technician.

- a. Demonstrate proper treatment room preparation & setup.
- b. Choose the correct equipment needed for the facial treatment.
- c. Select proper products needed.
- d. Setup facial supplies and disposables.
- e. Perform services using sanitation procedures and disinfection of implements.

Academic Standard (s):

SCSh2. Students will use standard safety practices for all classroom laboratory and field investigations.

- a. Follow correct procedures for use of scientific apparatuses.
- b. Demonstrate appropriate technique in all laboratory situations.
- c. Follow correct protocol for identifying and reporting safety problems and violations.

Electricity of Skincare

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Students will increase their knowledge on electricity in skincare and how to perform services using safety precautions. Students will study types of electric current, electrical measurements, and safety devices.

HS-SAC-8. Students will be able to explain different electrical currents, electrical measurements and safety devices. The students will understand the importance of safety when working with electrical currents and facial machines.

- a. Define different types of electrical currents.
- b. Describe electrical measurements and safety devices.
- c. Demonstrate proper use of facial equipment.
- d. Explain benefits of electrical current on the skin.

Academic Standard(s):

SCSh4. Students use tools and instruments for observing, measuring, and manipulating scientific equipment and materials.

- a. Develop and use systematic procedures for recording and organizing information.
- c. Use technology to develop, test, and revise experimental or mathematical models.

SPS10 Students will investigate the properties of electricity and magnetism.

- b. Explain the flow of electrons in terms of
 - alternating and direct current.
 - the relationship among voltage, resistance and current.
 - simple series and parallel circuits.

Facial Equipment

Students will demonstrate proper use of facial equipment, while using safety precautions. Students will determine any contraindications that may need addressed. State regulations will be enforced.

HS-SAC-9. Students will be able incorporate facial machines into their facial treatments. Safety precautions, contraindications and state regulations will be adhered to at all times.

- a. Explain the benefits of electrical current to the skin.
- b. List electrical machines used in the facial room.
- c. Describe possible contraindications.
- d. Demonstrate machine safety at all times.

Academic Standard(s):

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SCSh2. Students will use standard safety practices for all classroom laboratory and field investigations.

- a. Follow correct procedures for use of scientific apparatuses.
- b. Demonstrate appropriate technique in all laboratory situations.
- c. Follow correct protocol for identifying and reporting safety problems and violations.

SPS10 Students will investigate the properties of electricity and magnetism.

- c. Investigate applications of magnetism and/or its relationship to the movement of electrical charge as it relates to:
 - electromagnets
 - simple motors

Microdermabrasion

Students will learn the latest technology in microdermabrasion treatments. Students will discover how the skin is treated with crystals to improve the skin and appearance. Career exploration will cover different types of employment options for the students.

HS-SAC-10. Students will be able to understand the benefits of microdermabrasion. Students will understand the theory of microdermabrasion and how it has become a standard piece of equipment for all spas, med spas and salons. Immediate and long term benefits to the skin will be covered. This non abrasive treatment is progressive rather than aggressive in improving the client's skin condition.

- a. Explain equipment overview.
- b. Describe the history of microdermabrasion.
- c. Define the different types of crystals used in microdermabrasion.
- d. Describe the benefits and results of the facial treatments.
- e. Construct a list of contraindications.
- f. Define safety, sanitation and universal precautions defined.
- g. Record client medical history.
- h. Complete intake forms and informed consent.
- i. Prepare client for facial.
- j. Describe treatment protocol performed.
- k. Explain post care/home care.

Academic Standard(s):

SCSh8. Students will understand important features of the process of scientific inquiry.

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Students will apply the following to inquiry based learning practices:

- a. Scientific investigators control the conditions of their experiments in order to produce valuable data.
- b. Scientific researchers are expected to critically assess the quality of data including possible sources of bias in the investigation's hypotheses, observations, data analyses, and interpretations.

List of suggested books and reference material:

- a. Milady Standard ESTHETICS Fundamentals.
- b. Salon Fundamentals: Pivot-Point International.
- c. Microdermabrasion "The Professionals Guide" (DVD)
- d. Maximizing Medical Microdermabrasion (Book)

Reading Across the Curriculum

Reading Standard Comment

After the elementary years, students engage in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts, mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific vocabulary, and for students to excel in all subjects, they must learn the specific vocabulary of those subject areas in context.

Beginning with the middle grades years, students begin to self-select reading materials based on personal interests established through classroom learning. Students become curious about science, mathematics, history, and literature as they form contexts for those subjects related to their personal and classroom experiences. As students explore academic areas through reading, they develop favorite subjects and become confident in their verbal discourse about those subjects.

Reading across curriculum content develops both academic and personal interests in students. As students read, they develop both content and contextual vocabulary. They also build good habits for reading, researching, and learning. The Reading Across the Curriculum standard focuses on the academic and personal skills students acquire as they read in all areas of learning.

Students will enhance reading in all curriculum areas by:

- w. Reading in all curriculum areas

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- Read a minimum of 25 grade-level appropriate books per year from a variety of subject disciplines and participate in discussions related to curricular learning in all areas.
 - Read both informational and fictional texts in a variety of genres and modes of discourse.
 - Read technical texts related to various subject areas.
- x. Discussing books
- Discuss messages and themes from books in all subject areas.
 - Respond to a variety of texts in multiple modes of discourse.
 - Relate messages and themes from one subject area to messages and themes in another area.
 - Evaluate the merit of texts in every subject discipline.
 - Examine author's purpose in writing.
 - Recognize the features of disciplinary texts.
- y. Building vocabulary knowledge
- Demonstrate an understanding of contextual vocabulary in various subjects.
 - Use content vocabulary in writing and speaking.
 - Explore understanding of new words found in subject area texts.
- z. Establishing context
- Explore life experiences related to subject area content.
 - Discuss in both writing and speaking how certain words are subject area related.
 - Determine strategies for finding content and contextual meaning for unknown words.

CTAE Foundation Skills

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The CTAE Foundation Skills are aligned to the foundation of the U. S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by a national advisory group of employers, secondary and postsecondary educators, labor associations,

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and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy.

CTAE-FS-1 Technical Skills: Learners achieve technical content skills necessary to pursue the full range of careers for all pathways in the program concentration.

CTAE-FS-2 Academic Foundations: Learners achieve state academic standards at or above grade level.

CTAE-FS-3 Communications: Learners use various communication skills in expressing and interpreting information.

CTAE-FS-4 Problem Solving and Critical Thinking: Learners define and solve problems, and use problem-solving and improvement methods and tools.

CTAE-FS-5 Information Technology Applications: Learners use multiple information technology devices to access, organize, process, transmit, and communicate information.

CTAE-FS-6 Systems: Learners understand a variety of organizational structures and functions.

CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.

CTAE-FS-8 Leadership and Teamwork: Learners apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

CTAE-FS-9 Ethics and Legal Responsibilities: Learners commit to work ethics, behavior, and legal responsibilities in the workplace.

CTAE-FS-10 Career Development: Learners plan and manage academic-career plans and employment relations.

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CTAE-FS-11 Entrepreneurship: Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.

PROGRAM CONCENTRATION:

Healthcare Science

CAREER PATHWAY:

Personal Care Services

COURSE TITLE:

The Art and Science of Makeup

Course Description: This course is designed to introduce students to the world of professional makeup as a career choice. Students will examine the art and science of makeup as a profession, studying both the art and the scientific principles professional makeup. Students will develop knowledge of basic chemistry and ingredients used in cosmetics and skin care products. Students will be able to recognize skin conditions and skin types to assist in evaluating what products to use for that client. This will include basic knowledge of the structure and function of the skin as well as proper skin care. Students will be able to describe bacteriology and understand how to keep their tools and work area sterilized and sanitized. Students will earn credit hours toward the completion of the 1500 credit hours required by Georgia State Board of Cosmetology. This course provides more in-depth competencies for the co-curricular student organization SkillsUSA that should be incorporated throughout instructional strategies developed for the course.

Infection Control

Students will demonstrate knowledge of salon infection control and how to reduce the spread of infections and diseases. Infection control will include proper sanitation, decontamination, and sterilization. Safe use of chemicals will be applied in the classroom and clinic.

HS-ASM-1. Students will evaluate the regulations of infection control: principles, prevention, procedures and precautions. The students will demonstrate understanding of proper sanitation, disinfection and sterilization. Facial implements and machines will be properly disinfected and stored.

- a. Compare and contrast the regulatory agencies responsible for the cosmetology field (include OSHA, MSDS and the EPA).
- b. Distinguish the types and classifications of bacteria, bacterial growth, and reproduction.
- c. Define blood borne pathogens, viruses, and parasites.
- d. Differentiate the different methods of sanitation, decontamination, and sterilization.
- e. Identify the types of disinfectants and the disinfection procedure.
- f. Identify all safety rules used in the cosmetology profession.

HS-ASM-2. Students will demonstrate safety rules when mixing disinfectants.

- a. Select, mix, and store the correct antiseptic, disinfectant, and other decontamination chemicals to use in relation to the task.
- b. Demonstrate how to sanitize and disinfect all implements and tools used in makeup.
- c. Perform all sanitation, disinfection, and safety requirements essential to makeup services.

Academic Standard(s):

SCSh2. Students will use standards safety practices for all classroom laboratory and field investigation.

- a. Follow correct procedures for use of scientific apparatus.
- b. Demonstrate appropriate techniques in all laboratory situation.
- c. Follow correct protocol for identifying and reporting safety problems and violations.

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Science of Cosmetics and Skin

Students will develop some knowledge of basic chemistry and ingredients used in cosmetics and skin care products. Students will be able to recognize skin conditions and skin types to assist in evaluating what products to use for that client. This will include basic knowledge of the structure and function of the skin as well as proper skin care. Students will be able to demonstrate proper skin analyze, determining skin type and recommend proper skin care regimen. Students will demonstrate how to keep their tools and work area sterilized and sanitized.

HS-ASM-3. Students will learn how cosmetic ingredients affect the skin and appearance of the skin. The students will understand skin disorders that affect the skin and how to apply makeup to help conceal imperfections. The unit will cover bacteriology and how to help reduce the spread of infections and diseases in a professional setting. Students will be able to:

- a. Define basic chemistry.
- b. Understand cosmetic labels and identify purposes for various cosmetic ingredients used.
- c. Describe the structures and functions of the skin.
- d. Explain common disorders that affect the skin.
- e. Analyze a client's skin type and condition.
- f. Recommend proper skin care regimen for the client.
- g. Explain pH balancing.
- h. Demonstrate a skin cleansing procedure.
- i. Describe the three general forms of bacteria.
- k. Explain sterilization and sanitation.

Academic Standard(s):

SC1: Students will analyze the nature of matter and its classifications.

- b. Identify substances based on chemical and physical properties.

SC7: Students will characterize the properties that describe solutions and the nature of acids and bases.

- a. Explain the process of dissolving in terms of solute/solvent interactions.
- b. Compare, contrast, and evaluate the nature of acids and bases.

SS6: Students will investigate the properties of solutions.

1. Describe solutions.
2. Observe factors affecting the rate a solute dissolves in a specific solvent.
3. Compare and contrast the components and properties of acids and bases.

SB1: Students will analyze the nature of the relationship between structures and functions in living cells.

2. Explain how enzymes function as catalysts.

The Art of Light and Color

Students will have a heightened awareness of the relationship of color and light as well as an understanding of how color is the language used by the makeup artist. Students will learn the importance of the color wheel and associate makeup with painting in transparent pigments.

HS-ASM-4. Students will have an understanding of light and color and be able to:

- a. Distinguish color primaries from light primaries.
- b. Explain the reflection and refraction of light.
- c. Describe how different light and media affect colors.
- d. Explain the three dimensions of color and the importance of color perception.

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Academic Standard(s):

SP4: Students will analyze the properties and applications of waves.

- b. Experimentally determine the behavior of waves in various media in terms of reflection, refraction, and diffraction of waves.

Anatomy of the Face and Art of Makeup

Students will analyze the anatomy of the face in order to incorporate the following principles of art and design: proportion, balance, emphasis, rhythm, and unity. Students will learn corrective makeup as well as special occasion makeup and the difference between a day-time makeup style and special occasion makeup styles.

HS-ASM-5. Students will study the integumentary, skeletal, and muscular systems. The students will demonstrate various makeup techniques, including corrective makeup and be able to:

- a. Describe the zones of the face and the value of the concept to the makeup artist.
- b. Identify the eight structures of the face.
- c. Relate the study of anatomy and architecture of the face to the art of makeup.
- d. Describe the functions of the skeletal system.
- e. Name the major bones of the cranium and face.
- f. Describe the functions of the muscular and nervous systems.
- g. Describe the structure of the integumentary system and its role.
- h. Demonstrate a complete step-by-step makeup application.
- i. Demonstrate corrective makeup for various face shapes.
- j. Demonstrate contouring and highlighting techniques.

Academic Standard(s):

SAP2: Students will analyze the interdependence of the integumentary, skeletal, and muscular systems as these relate to the protection, support and movement of the human body.

1. Relate the structure of the integumentary system to its functional role in protecting the body and maintaining homeostasis.

Career Opportunities, Professionalism and Business Management Skills

Students will examine the various career options and opportunities for makeup artists as well as human relations and professional ethics. Students will develop a clear understanding about the importance of the artist's visual impact and be able to define the meaning of self-worth.

HS-ASM-6. Students will develop confidence and self-worth as they gain the understanding and ability to:

- a. Identify some of the training and qualities needed to become a successful makeup artist.
- b. Compare different job opportunities available to the professional makeup artist.
- c. Prepare the makeup artist's marketing materials such as the artist's portfolio.
- d. Relate the practice of human relations skills to success in business.
- e. Define and demonstrate business ethics and courtesy in business dealings.
- f. Explain the keys to good health.
- g. Evaluate personal hygiene and grooming habits.
- h. Explain the use of the "rate sheet" for makeup artist and how to determine what rates to charge based on "demand" in the area the makeup artist serves.

Academic Standard(s):

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ELA9LSV1: The student participates in student-to-teacher, student-to-student, and group verbal interactions.

The student:

1. Initiates new topics and responds to adult-initiated topics.
2. Asks relevant questions.
3. Responds to questions with appropriate information.
4. Actively solicits another person's comments or opinions.
5. Offers own opinion forcefully without domineering.
7. Gives reasons in support of opinions expressed.
8. Clarifies, illustrates, or expands on a response when asked to do so; asks classmates for similar expansions.

SSEM12: The student will explain how the Law of Demand, the Law of Supply, prices and profits work to determine production and distribution in a market economy.

1. Define the Law of Supply and the Law of Demand.
2. Describe the roles of buyers and sellers in determining market clearing price.

Reading Across the Curriculum

Reading Standard Comment

After the elementary years, students engage in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts, mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific vocabulary, and for students to excel in all subjects, they must learn the specific vocabulary of those subject areas in context.

Beginning with the middle grades years, students begin to self-select reading materials based on personal interests established through classroom learning. Students become curious about science, mathematics, history, and literature as they form contexts for those subjects related to their personal and classroom experiences. As students explore academic areas through reading, they develop favorite subjects and become confident in their verbal discourse about those subjects.

Reading across curriculum content develops both academic and personal interests in students. As students read, they develop both content and contextual vocabulary. They also build good habits for reading, researching, and learning. The Reading Across the Curriculum standard focuses on the academic and personal skills students acquire as they read in all areas of learning.

Students will enhance reading in all curriculum areas by:

- y. Reading in all curriculum areas
 - Read a minimum of 25 grade-level appropriate books per year from a variety of subject disciplines and participate in discussions related to curricular learning in all areas.
 - Read both informational and fictional texts in a variety of genres and modes of discourse.
 - Read technical texts related to various subject areas.
- z. Discussing books
 - Discuss messages and themes from books in all subject areas.
 - Respond to a variety of texts in multiple modes of discourse.
 - Relate messages and themes from one subject area to messages and themes in another area.

Implementation date
Fall 2010

- Evaluate the merit of texts in every subject discipline.
- Examine author's purpose in writing.
- Recognize the features of disciplinary texts.
- aa. Building vocabulary knowledge
 - Demonstrate an understanding of contextual vocabulary in various subjects.
 - Use content vocabulary in writing and speaking.
 - Explore understanding of new words found in subject area texts.
- bb. Establishing context
 - Explore life experiences related to subject area content.
 - Discuss in both writing and speaking how certain words are subject area related.
 - Determine strategies for finding content and contextual meaning for unknown words.

CTAE Foundation Skills

The Foundation Skills for Career, Technical and Agricultural Education (CTAE) are critical competencies that students pursuing any career pathway should exhibit to be successful. As core standards for all career pathways in all program concentrations, these skills link career, technical and agricultural education to the state's academic performance standards.

The CTAE Foundation Skills are aligned to the foundation of the U. S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by a national advisory group of employers, secondary and postsecondary educators, labor associations, and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy.

CTAE-FS-1 Technical Skills: Learners achieve technical content skills necessary to pursue the full range of careers for all pathways in the program concentration.

CTAE-FS-2 Academic Foundations: Learners achieve state academic standards at or above grade level.

CTAE-FS-3 Communications: Learners use various communication skills I expressing and interpreting information.

CTAE-FS-4 Problem Solving and Critical Thinking: Learners define and solve problems, and use problem-solving and improvement methods and tools.

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CTAE-FS-6 Systems: Learners understand a variety of organizational structures and functions.

CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.

CTAE-FS-8 Leadership and Teamwork: Learners apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.

Implementation date
Fall 2010

CTAE-FS-9 Ethics and Legal Responsibilities: Learners commit to work ethics, behavior, and legal responsibilities in the workplace.

CTAE-FS-10 Career Development: Learners plan and manage academic-career plans and employment relations.

CTAE-FS-11 Entrepreneurship: Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.

PROGRAM CONCENTRATION:

Healthcare Science

CAREER PATHWAY:

Personal Care Services

COURSE TITLE:

Cosmetology Science

Course Description: This course is designed to enhance the students understanding of scientific concepts related to the cosmetology field. Student will explore various sciences in this course. Infection Control will be implemented throughout the course to adhere to the standards and guidelines to prevent the spread of infectious diseases. Students will examine the conditions, disorders and diseases of the hair, skin, and nails. The functions, cell growth, and reproduction will be included as well as instruction on how to maintain healthy hair, skin and nails. Bacteriology will be evaluated and how the spread of infectious microbes and diseases occur in the salon. Students will compare and contrast different body systems and how they affect the hair, skin and nails. Emphasis will be placed on classroom safety and professional work ethics.

Salon Safety

Students will learn the importance of safety in the salon. The student will draw upon experiences in the classroom/lab setting and further examine hazards in the workplace.

HS-CS-1. Students will explore state and federal laws and practice required safety protocol in the workplace, they will understand the risk involved when working with chemicals and other hazards that can be found in the salon.

- a. Interpret state and federal laws regarding safety in the workplace and explain purpose of OSHA, as well as the use of MSDS sheets.
- b. Describe basic salon safety rules and their purpose. They will also determine correct/incorrect settings in the salon.
- c. Explain toxicity and carcinogenicity as it relates to exposure in the salon.
- d. Determine the health effects that exist for short term and long term exposure to chemicals found in salons
- e. Demonstrate proper handling and storage of all chemicals and the sanitation of tools and equipment used in the salon.

Academic Standard(s):

SCSh1. Students will evaluate the importance of curiosity, honesty, openness, and skepticism in science.

- a. Exhibit the above traits in their own scientific activities.
- b. Recognize that different explanations often can be given for the same evidence.

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- c. Explain that further understanding of scientific problems relies on the design and execution of new experiments which may reinforce or weaken opposing explanations.

SCSh2. Students will use standard safety practices for all classroom laboratory and field investigations.

- a. Follow correct procedures for use of scientific apparatus.
- b. Demonstrate appropriate techniques in all laboratory situations.
- c. Follow correct protocol for identifying and reporting safety problems and violations.

HS-CS-2. Students will understand how science is used in cosmetology and predict the outcome of services using the three step scientific method.

- a. Investigate how science is used in cosmetology.
- b. Use the three step scientific method (observation, reasoning, and testing) to evaluate services that have been performed.
- c. Explain the relationship between cause and effects and its importance.
- d. Interpret scientific research to choose the proper products needed for the service that is to be performed.

Academic Standard(s):

SCSh3. Students will identify and investigate problems scientifically.

- a. Suggest reasonable hypotheses for identified problems.
- b. Develop procedures for solving scientific problems.

SCSh7. Students will analyze how scientific knowledge is developed.

Students recognize that:

- a. The universe is a vast single system in which the basic principles are the same everywhere.
- b. Universal principles are discovered through observation and experimental verification.

SCSh8. Students will understand important features of the process of scientific inquiry.

Students will apply the following to inquiry learning practices:

- b. Scientific researchers are expected to critically assess the quality of data including possible sources of bias in their investigations' hypotheses, observations, data analyses, and interpretations.

Structure of Hair, Skin, and Nails

Students will understand anatomy and physiology exploring the structure of cells, hair, skin, and nails as well as systems of the body and explain why it is important for cosmetologist to have an understanding of the body.

HS-CS-3. Students will understand the basic structure of life. The student will examine the periodic table of elements, cells and their reproduction.

- a. Examine the periodic table of elements and explain the COHNS elements.
- b. Distinguish between organic and inorganic.
- c. Label and explain the function of each part of a cell.
- d. Diagram the phases of mitosis.
- e. Explain the relationship between hair growth and skin renewal through the reproduction of cells.

Academic Standard(s)

Implementation date
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SPS1. Students will investigate our current understanding of the atom.

- a. Examine the structure of the atom in terms of proton, electron, and neutron locations.
 - atomic mass and atomic number.

SPS4. Students will investigate the arrangement of the Periodic Table.

SB1. Students will analyze the nature of the relationships between structures and functions in living cells.

HS-CS-4. Students will demonstrate knowledge of anatomy as it relates to bone structure and muscle contours in haircutting, facial and shampooing services.

- a. Describe the importance of anatomy and physiology in the cosmetology profession.
- b. Define tissues and name the types of tissues found in the body.
- c. Demonstrate the proper massage procedures in manicure, pedicures, facial massage and shampooing services.
- d. Discriminate between different facial bone structures and muscle contours as it relates to haircutting, facials and make-up.
- e. Diagram the muscular system, explain the types of muscle tissue and the parts of the muscle.
- f. Define voluntary and involuntary muscles.
- g. Demonstrate the stimulation of muscle including massage, electrical current, light and heat rays, nerve impulses and chemicals.
- h. Explain the importance of the skeletal system, label the bones.
- i. Compare and contrast the 10 main body systems and their basic functions.

Academic Standard(s)

SAP1. Students will analyze anatomical structures in relationship to their physiological functions.

- a. Apply correct terminology when explaining the orientation of body parts and regions.
- b. Investigate the interdependence of the various body systems to each other and to the body as a whole.
- d. Relate cellular metabolism and transport to homeostasis and cellular reproduction.
- e. Describe how structure and function are related in terms of cell and tissue types.

SAP2. Students will analyze the interdependence of the integumentary, skeletal, and muscular systems as these relate to the protection, support and movement of the human body.

- a. Relate the structure of the integumentary system to its functional role in protecting the body and maintaining homeostasis.
- b. Explain how the skeletal structures provide support and protection for tissues, and function together with the muscular system to make movements possible.

SAP3. Students will assess the integration and coordination of body functions and their dependence on the endocrine and nervous systems to regulate physiological activities.

- a. Interpret interactions among hormones, senses, and nerves which make possible the coordination of functions of the body.
- c. Describe how the body perceives internal and external stimuli and responds to maintain a stable internal environment, as it relates to biofeedback.

SAP4. Students will analyze the physical, chemical, and biological properties of process systems as these relate to transportation, absorption and excretion, including the cardiovascular, respiratory, digestive, excretory and immune systems.

- a. Describe the chemical and physical mechanisms of digestion, elimination, transportation, and absorption within the body to change food and derive energy.

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- e. Describe the effects of aging on body systems.

HS-CS-5. Students will understand bacteriology, disease, infection, and be able to demonstrate safety precaution to reduce the risks of bloodborne pathogens.

- a. Describe the two types of bacteria: pathogenic and nonpathogenic.
- b. Examine where people come into contact with bacteria.
- c. Label the classification of bacteria; cocci, bacilli, and spirilla and explain the illness that relates.
- d. Describe the growth, reproduction, and movement of bacteria.
- e. Compare and contrast bacterial illness and viruses.
- f. Describe Acquired Immune Deficiency Syndrome (AIDS) and Human Immunodeficiency Virus (HIV) and how it is spread. Determine the ways the disease can be spread in a salon setting and the importance of sanitary practices.
- g. Distinguish between local and general infections.
- h. Define contagious and immunity, explain the different types of immunity.

HS-CS-6. Students will understand the structure of the skin and recognize skin disease and be able to refer clients to a physician if needed.

- a. Label the layers of the skin.
- b. Explain the different types of nerves, (sensory, secretory, and motor) and how the skin is receptive to stimulation.
- c. Define exocrine, endocrine and sebaceous glands explain the purpose.
- d. Explain the role sebum has in keeping the skin healthy through Natural Moisturizing Factor (NMF).
- e. Explain factors that determine the color of the skin.
- f. Investigate the effects of UV, UVC, UVB, UVA rays on the skin and the use of Sun Protection Factor (SPF) to combat harmful rays.
- g. Explain Irritant contact dermatitis and the risk associated with cosmetologist.
- h. Explain Allergic Contact Dermatitis and the risk associated with clients.
- i. Analyze the skin and scalp to determine if there is evidence of skin disorders, diseases, or infections and determine if performing the requested service is advisable.

Academic Standard(s):

SAP3. Students will assess the integration and coordination of body functions and their dependence on the endocrine and nervous systems to regulate physiological activities.

- a. Interpret interactions among hormones, senses, and nerves which make possible the coordination of functions of the body.
- c. Describe how the body perceives internal and external stimuli and responds to maintain a stable internal environment, as it relates to biofeedback.

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- a. Describe the chemical and physical mechanisms of digestion, elimination, transportation, and absorption within the body to change food and derive energy.
- e. Describe the effects of aging on body systems.

HS-CS-7. Students will understand the structure and properties of the hair. Students will examine normal hair growth and hair loss. This will enable the student to provide information to their client on the proper course of action to take if they experience hair loss.

- a. Identify the different types of hair. (vellus, terminal, etc.)
- b. Describe the hair growth cycles (anagen, catagen, telogen) phase.

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- c. Explain normal and abnormal hair loss as well as the normal growth rate of hair.
- d. Identify the layers of the hair shaft; explain the importance of each layer.
- e. Determine the chemical composition of hair.
- f. Label the hair follicle and explain the purpose of each part.
- g. Examine the protein structure of the hair, the parts of the polypeptide chain.
- h. Explain the purpose of side bonds and how they are broken as well as what effects can be achieved through the breaking of the bonds.
- i. Perform hair and scalp analysis to determine density, texture, porosity.

Chemistry

Students will explore basic chemistry concepts and determine their relation to shampoo, haircolor, styling aids and other chemicals used in the salon. Student will investigate concepts involving solutions, mixtures, and chemical reactions. They will be able to relate these concepts to chemical services performed in the salon.

HS-CS-8. Students will be able to use basic chemistry concepts when using chemicals in the salon; they will explain the chemical process of permanent wave procedures and chemical hair relaxer.

- a. Distinguish between the three types of matter.
- b. Compare and contrast physical and chemical change.
- c. Explain how (REDOX) oxidation reaction occurs.
- d. Perform permanent wave and chemical hair processing services to explain the chemical reduction reactions and how it takes place within these services.
- e. Determine the active ingredient and the required processing temperature to achieve optimum results for varies types of hair.
- f. Identify solutions, mixtures, emulsions and suspensions.
- g. Explain the pH scale, determine the different effects of pH on hair and skin.

Academic Standard(s)

SC1 Students will analyze the nature of matter and its classifications.

- b. Identify substances based on chemical and physical properties.

SC5. Students will understand that the rate at which a chemical reaction occurs can be affected by changing concentration, temperature, or pressure and the addition of a catalyst.

- a. Demonstrate the effects of changing concentration, temperature, and pressure on chemical reactions.
- b. Investigate the effects of a catalyst on chemical reactions and apply it to everyday examples.

SC7. Students will characterize the properties that describe solutions and the nature of acids and bases.

- a. Explain the process of dissolving in terms of solute/solvent interactions:
 - Observe factors that affect the rate at which a solute dissolves in a specific solvent
- b. Compare, contrast, and evaluate the nature of acids and bases:
 - pH
 - Acid-Base neutralization

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SPS5. Students will compare and contrast the phases of matter as they relate to atomic and molecular motion.

- a. Compare and contrast the atomic/molecular motion of solids, liquids, gases and plasmas.
- b. Relate temperature, pressure, and volume of gases to the behavior of gases.

SPS6. Students will investigate the properties of solutions.

- a. Describe solutions in terms of solute/solvent.
- b. Observe factors affecting the rate a solute dissolves in a specific solvent.
- d. Compare and contrast the components and properties of acids and bases.
- e. Determine whether common household substances are acidic, basic, or neutral.

HS-CS-9. Students will understand the chemistry of shampoo, the roles of the surfactant molecule and investigate the ingredients found in shampoos, conditioners and styling products and how to determine the appropriate product for your client.

- a. Perform shampooing services and explain the role of the surfactant molecule.
- b. Define surface tension, hydrophilic, lipophilic.
- c. Perform shampoo services using different types of shampoos and examine their results.
- d. Identify the types of ingredients and their use that are most commonly found in shampoo, conditioner, and styling products and the effects they have on the hair.

HS-CS-10. Student will understand the chemical reaction that takes places during haircolor and hair lightener services.

- a. Explain The Law of Color.
- b. Predict the levels of a variety of hair types before and after a haircolor/hair lightener services is performed.
- c. Determine the natural level of hair and explain the two types of melanin found in the cortical layer.
- d. Describe the chemical reaction that takes place during haircolor/lightening services and the use of an oxidizer at various volumes.

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HS-CS-11. Students will perform salon services master in previous coursework. They will apply new scientific knowledge and develop an understanding of the benefits having this knowledge.

- a. Demonstrate chemical services. (haircolor, chemical texture services, chemical hair relaxers)
- b. Perform facial and skin care services.
- c. Demonstrate massage techniques for the hands, scalp, and feet.
- d. Demonstrate shampoo services.

Implementation date
Fall 2010

Reading Across the Curriculum

Reading Standard Comment

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 - Respond to a variety of texts in multiple modes of discourse.
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 - Evaluate the merit of texts in every subject discipline.
 - Examine author's purpose in writing.
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