

## 7812 Cosmetology II Content Outline

### UNIT A LEADERSHIP

- 1.00 Communication, problem-solving, and team-building skills
  - 1.01 Communication skills
    - A. Terms and definitions
      - 1. Outline
      - 2. Gesture
      - 3. Demonstration
      - 4. Introduction to presentation
      - 5. Body of presentation
      - 6. Conclusion of presentation
    - B. Purposes for using presentations
    - C. Guidelines for preparing successful presentations
    - D. Step-by-step method for preparing a presentation
  - 1.02 Problem-solving and team-building skills
    - A. Terms and definitions
      - 1. Benchmarking
      - 2. Customer
      - 3. Customer requirements
      - 4. Supplier
      - 5. Brainstorming
      - 6. Check sheets
      - 7. Surveying
      - 8. Interviewing
      - 9. Cost-benefit analysis
      - 10. Flowcharts
    - B. Steps in problem-solving process
      - 1. Identify problem
      - 2. Describe causes
      - 3. Search possible solutions
      - 4. Choose solution
      - 5. Carry out solution
      - 6. Check solution
    - C. Steps in quality improvement process
      - 1. Identify end product
      - 2. Identify customer
      - 3. Identify customer's requirements
      - 4. Use customer requirements to identify specifications
      - 5. Outline steps to follow in product production
      - 6. Identify and choose evaluation techniques to assure on track
      - 7. Determine if current process is adaptable to changes

8. Evaluate process and results
9. Go back to step one

## **UNIT B ORIENTATION**

### 2.00 Finding a job

#### 2.01 Job search

- A. Network
  1. Existing salons
  2. Distributors
  3. Career counselors
  4. School-to-work transition
    - a. Apprenticeship
    - b. Job shadowing
- B. Other sources
  1. Newspaper classified section
  2. Cosmetology school job listings
  3. Employment Security Commission
  4. Help-wanted signs in salons
  5. Mail resumes

#### 2.02 Resume, cover letter, and applications

- A. Resume
  1. Content
  2. Format
- B. Cover letter/letter of application
  1. Content
  2. Format

#### 2.03 Interview

- A. Appearance
- B. Communication skills
- C. Personal qualities and knowledge of industry

## **UNIT C SKIN SERVICES**

### 3.00 Histology of skin

#### 3.01 Histology of skin

- A. Main divisions
  1. Epidermis
    - a. Stratum corneum
    - b. Stratum lucidum
    - c. Stratum granulosum
    - d. Stratum germinativum
  2. Dermis
    - a. Papillary layer
    - b. Reticular layer
    - c. Subcutaneous layer

- B. Skin nourishment
  - 1. Blood
  - 2. Lymph
- C. Nerves of skin
  - 1. Motor
  - 2. Sensory
  - 3. Secretory
- D. Sense of touch
  - 1. Touch
  - 2. Pain
  - 3. Heat
  - 4. Cold
  - 5. Pressure
  - 6. Deep touch
- E. Skin elasticity
- F. Skin color
  - 1. Fair, medium, or dark
  - 2. Melanin
- G. Glands of skin
  - 1. Sweat glands/sudoriferous
  - 2. Oil glands/sebaceous
- H. Functions of skin
  - 1. Protection
  - 2. Sensation
  - 3. Heat regulation
  - 4. Excretion
  - 5. Secretion
  - 6. Absorption
- 3.02 Skin disorders and diseases
  - A. Basic terms
    - 1. Dermatology
    - 2. Dermatologist
    - 3. Pathology
    - 4. Etiology
    - 5. Diagnosis
    - 6. Prognosis
  - B. Lesions of the skin
    - 1. Subjective
      - a. Itching
      - b. Burning
      - c. Pain
    - 2. Objective
      - a. Pimples
      - b. Pustules
      - c. Inflammation

3. Primary lesions
  - a. Macule
  - b. Papule
  - c. Wheal
  - d. Tubercle
  - e. Tumor/nodule
  - f. Vesicle
  - g. Bulla
  - h. Pustule
  - i. Cyst
4. Secondary lesions
  - a. Scale
  - b. Crust
  - c. Excoriation
  - d. Fissure
  - e. Ulcer
  - f. Scar
  - g. Keloid
  - h. Stain
- C. Disorders of sebaceous glands
  1. Comedones
  2. Milia
  3. Acne
    - a. Acne simplex
    - b. Acne vulgaris
  4. Seborrhea
  5. Asteatosis
  6. Rosacea
  7. Stomatoma
- D. Disorders of sudoriferous glands
  1. Bromhidrosis/osmidrosis
  2. Anhidrosis
  3. Hyperhidrosis
  4. Miliaria rubra/prickly heat
- E. Inflammation of skin
  1. Dermatitis
  2. Eczema
  3. Psoriasis
  4. Herpes simplex
- F. Occupational disorders/ dermatitis venenata

- G. Pigmentation of skin
  - 1. Tan
  - 2. Lintigines
  - 3. Stains
  - 4. Chloasma
  - 5. Naevus
  - 6. Leukoderma
  - 7. Vitiligo
  - 8. Albinism
- H. Hypertrophies (new growths) of skin
  - 1. Keratoma
  - 2. Mole
  - 3. Basal cell carcinoma
  - 4. Verruca
- I. Plastic surgery
  - 1. Rhytidectomy
  - 2. Blepharoplasty
  - 3. Chemical peeling
  - 4. Rhinoplasty
  - 5. Mentoplasty
  - 6. Dermabrasion
  - 7. Injectable fillers
  - 8. Retin-A, retinoic acid, tretinoin, and vitamin A acid
- J. Terms for diseases
  - 1. Disease
  - 2. Skin disease
  - 3. Acute disease
  - 4. Chronic disease
  - 5. Infectious disease
  - 6. Congenital disease
  - 7. Seasonal disease
  - 8. Occupational disease
  - 9. Parasitic disease
  - 10. Pathogenic disease
  - 11. Systemic disease
  - 12. Venereal disease
  - 13. Epidemic
  - 14. Allergy
  - 15. Inflammation

- 4.00 Principles of massage and facials
  - 4.01 Theory of massage and facials
    - A. Purpose and general description of massage
    - B. Accomplishing manipulative movements
      - 1. Muscle origin
      - 2. Muscle insertion
    - C. Basic massage manipulations
      - 1. Effeurage
        - a. Finger position
        - b. Palm position
      - 2. Petrissage
        - a. Purpose of kneading
        - b. Fulling
      - 3. Friction
        - a. Chucking
        - b. Rolling
        - c. Wringing
      - 4. Percussion or tapotement
        - a. Tapping
        - b. Slapping
        - c. Hacking
      - 5. Vibration
        - a. Shaking movement
        - b. Highly stimulating
        - c. Muscular contractions
      - 6. Joint movements
        - a. Arms
        - b. Hands
        - c. Feet
      - 7. Physiological effects of massage
        - a. Motor points
        - b. Skin
        - c. Circulation
        - d. Muscles
        - e. Nerves
      - 8. Limiting conditions
        - a. High blood pressure
        - b. Stroke
        - c. Diabetes
        - d. Heart disease

9. Stimulation
  - a. Massage
  - b. Electrical current
  - c. Light rays
  - d. Heat rays
  - e. Moist heat
  - f. Nerve impulses
  - g. Chemical
- D. Facials
  1. Facial treatments
    - a. Preservative treatments
    - b. Corrective treatments
    - c. Benefits
  2. Preparation for facial massage
  3. Equipment, implements, and materials
  4. Procedure
    - a. Preparation of client
    - b. Client skin analysis
    - c. Cleansing cream application
    - d. Removal of cleansing cream
    - e. Steaming of face (optional)
    - f. Application of massage cream
    - g. Facial manipulation
    - h. Infrared light treatment
    - i. Removal of massage cream
    - j. Use of astringents
    - k. Treatment masks
    - l. Moisturizer application
    - m. Completion
  5. Facial manipulation
    - a. Face
    - b. Chest
    - c. Back
- E. Special problems
  1. Facials for dry skin
    - a. Infrared lamp
    - b. Galvanic current
    - c. Indirect high-frequency current
  2. Facials for oily skin and blackheads
  3. Facials for whiteheads
  4. Facials for acne
    - a. Limited treatment measures
    - b. Equipment, implements, and materials
    - c. Procedure
  5. Diet for acne

- F. Packs and masks
  - 1. Custom-designed masks
    - a. Types
    - b. Use of gauze for application
    - c. Procedure for applying gauze
    - d. Equipment, implements, and materials
    - e. Procedure
  - 2. Hot oil mask facial
    - a. Equipment, implement, and materials
    - b. Procedure
  - 3. Reasons clients find fault with facials
- 4.02 Facial makeup
  - A. Preparation for application
    - 1. Equipment, implement, and materials
  - B. Cosmetics
    - 1. Selecting foundation
    - 2. Face powders
    - 3. Cheek and lip color
      - a. Liquid
      - b. Cream
      - c. Dry
      - d. Brush-on
  - C. Eye makeup
    - 1. Colors or shadow
    - 2. Eyeliner
    - 3. Eyebrow pencils
    - 4. Mascara
  - D. Applying makeup
    - 1. Cleansing cream or lotion
    - 2. Astringent or skin freshener
    - 3. Moisturizing lotion
    - 4. Eyebrows
    - 5. Foundation
    - 6. Powder
    - 7. Cheek color
    - 8. Corrective makeup
    - 9. Eye color
    - 10. Eyeliner
    - 13. Lip color
  - E. Techniques for multicultural clients
    - 1. Foundation
    - 2. Powder
    - 3. Contour shading and highlighting
    - 4. Cheek color

- F. Facial features
    - 1. Corrective makeup techniques
      - a. Oval
      - b. Round
      - c. Square
      - d. Pear-shaped
      - e. Heart-shaped
      - f. Diamond
      - g. Oblong
  - G. Applying corrective makeup
    - 1. Corrective needs
      - a. Concealing wrinkles
      - b. Forehead
      - c. Nose
      - d. Chin
      - e. Jaw line and neck
      - f. Eyes
      - g. Shadowing and highlighting techniques
    - 2. Use of eyebrow pencil
      - a. Corrective placing and shaping
      - b. Eyebrow arching
      - c. Implements, supplies, and materials
      - d. Procedure for eyelash curl
    - 3. Corrective makeup for lips
- 4.03 Lash and brow tints
- A. Safety precautions
  - B. Procedure
- 4.04 Artificial eyelashes
- A. Applying strip eyelashes
    - 1. Equipment, implements, and supplies
    - 2. Procedure
  - B. Removing strip eyelashes
  - C. Applying semi-permanent individual eyelashes (eye tabbing)
    - 1. Purpose
    - 2. Equipment, implements, and materials
    - 3. Allergy test
    - 4. Different lengths
    - 5. Upper lash
    - 6. Lower lash
    - 7. Safety precautions

- 4.05 Remove unwanted hair
    - A. History
    - B. Permanent removal
      - 1. Electrolysis
        - a. Galvanic direct current
        - b. Decomposes dermal papilla
      - 2. Thermolysis
        - a. High frequency or alternating current
        - b. Destroys papilla
      - 3. Epilator
        - a. Up to 10 needles inserted
      - 4. Blend method
        - a. Galvanic current and heat from high frequency current
      - 5. Body areas that can or cannot be treated
      - 6. Implements, equipment, and materials
    - C. Temporary removal
      - 1. Shaving
      - 2. Tweezing
      - 3. Depilatories
        - a. Hot wax
          - (1) Procedure
          - (2) Safety precautions
        - b. Cold wax
        - c. Chemical depilatories
          - (1) Skin test
          - (2) Procedure
- 4.06 Safety and sanitation
  - A. Disinfect equipment and implements
  - B. Wash and sanitize hands before and after every client
  - C. Keep containers tightly closed and labeled
  - D. Store properly
  - E. Wear gloves when required
  - F. Discard non-sanitizable implements and non-reusable supplies
  - G. Use eye pads and goggles when needed
  - H. Keep a record for all clients
  - I. Test temperature of heated wax before applying
  - J. Keep wax and/or chemical depilatories away from client eyes and other areas where hair will not be removed
  - L. Cleanse the skin prior to treatment
  - M. Do not re wax sensitive skin
  - N. Do not use wax over moles, warts, irritated or abraded skin, bruises, varicose veins, or sunburn

## UNIT D ELECTRICITY AND LIGHT THERAPY

### 5.00 Nature of electricity

#### 5.01 Nature of electricity

- A. Electric current, flow of electricity
  - 1. Conductors
    - a. Copper and most metals
    - b. Water
    - c. Human body
  - 2. Insulator or non-conductor
    - a. Rubber
    - b. Silk
    - c. Wood
    - d. Glass
    - e. Cement
  - 3. Complete circuit

#### 5.02 Electrical principles and measurements

- A. Direct current (DC)
  - 1. Even flow in one direction
  - 2. Examples
    - a. Flashlight
    - b. Battery
  - 3. Converter changes AC to DC
  - 4. Produces chemical reaction
- B. Alternating current (AC)
  - 1. Rapid and interrupted current
  - 2. One direction and then the opposite
  - 3. Produces mechanical reaction
  - 4. Examples plug into the wall
    - a. Hair dryer
    - b. Curling iron
  - 5. Rectifier changes AC to DC
- C. Electric measurement
  - 1. Volt: Pressure or force that pushes flow of electron
  - 2. Amp/ampere
    - a. Strength of electrical current
    - b. Milliampere is 1/1000 of an ampere
  - 3. Ohm: resistance of electric current
  - 4. Watt: measurement of electrical energy used per second
  - 5. Kilowatt is 1000 watts

#### 5.03 Safe use of equipment

- A. Safety devices
  - 1. Fuse
  - 2. Circuit breaker
  - 3. Wall plate
  - 4. Underwriters Laboratory (UL)

- B. Other electrical equipment
  - 1. Vibrator
  - 2. Steamer and vaporizer
  - 3. Curling iron
  - 4. Heating cap
  - 5. Processing or accelerator machine
  - 6. Hair dryer
  - 7. Electrical heater
- 5.04 Theories of current modalities
  - A. Galvanic current
    - 1. Direct current (DC)
    - 2. Low voltage and high amperage
    - 3. Chemical effect
    - 4. Electrodes
      - a. Phoresis
        - (1) Cathode, black “N” or “-“ sign
          - (a) Anaphoresis
            - 1. Alkaline reaction
            - 2. Increases blood flow
            - 3. Softens tissue
            - 4. Stimulates nerves
          - (2) Anode, red “P” or “+” sign
            - (a) Cataphoresis
              - 1. Acidic reaction
              - 2. Slows blood flow
              - 3. Decreases redness or inflammation
              - 4. Hardens tissue, closes pores
              - 5. Soothes nerves
      - 5. Comb electrode and rake electrode used on scalp
      - 6. Wrist electrode
        - a. Cosmetic use
        - b. Indirect method
      - 7. Carbon electron held by client
      - 8. Massage roller electrode applied to client by stylist
      - 9. Mushroom electrode for use on face
    - B. Faradic and sinusoidal current
      - 1. Alternating current (AC)
      - 2. Two electrodes (one negative one positive)
      - 3. Mechanical, non-chemical reaction
        - a. Muscle contraction improves tone
        - b. Improves blood circulation
        - c. Stimulation of hair growth
        - d. Increased glandular activity
      - 4. Current used no longer than 15-20 minutes

- C. Tesla high-frequency current
    - 1. Alternating current (AC)
    - 2. Violet-ray
    - 3. Germicidal effect
    - 4. Beneficial for acne-prone skin
    - 5. Application
      - a. Direct: electrode directly on client's scalp or face
      - b. Indirect: client hold electrode
    - 6. Improves blood circulation
    - 7. Increases rate of metabolism
    - 8. Increases sebaceous glandular activity
    - 9. Do not use alcohol or alcohol-based creams
- 5.05 Light therapy
- A. Electromagnetic radiation, radiant energy
    - 1. Electromagnetic spectrum, wavelengths
      - a. Measurement form crest to crest
      - b. Visible light rays
        - (1) Red, orange, yellow, green, blue, indigo, violet
          - (a) Violet shortest wave length
          - (b) Red longest wave length
        - (2) Seen by human eye
    - 2. Therapeutic light
      - a. White light
        - (1) Fluorescent creates blue tones or cool tones
        - (2) Incandescent creates redder tones and warmer cast
      - b. Blue light
        - (1) Use on bare oily skin
        - (2) Some germicidal and chemical benefits
        - (3) Least penetrating
      - c. Red light
        - (1) Deepest penetration
        - (2) Produces heat
    - 3. Invisible light rays
      - a. Infrared light largest percentage of electromagnetic spectrum
      - b. Increases circulation
      - c. Increases skin gland secretions
      - d. Relaxes muscles
      - e. Stimulates cell and tissue activity
      - f. Exposure time 5-15 minutes
      - g. Exposure range 30" from clients face
      - h. Eye pads or protective eye forms required

- B. Ultraviolet light UV rays
  - 1. Least percentage of electromagnetic spectrum
  - 2. Short wave lengths
  - 3. Least penetrating
  - 4. Produce chemical effects
  - 5. Kills germs (germicidal)
  - 6. Can tan skin
  - 7. Helps produce vitamin D in skin
  - 8. Skin under attack of UV radiation causes skin cancer
  - 9. Eye protection needed
  - 10. Lightens hair color
  - 11. Exposure time 1-5 minutes
  - 12. Germicidal treatment place 12" from skin
  - 13. Scalp treatment 20"-30" from skin
- C. Safety precautions
  - 1. All appliances UL certified
  - 2. Read instructions carefully
  - 3. Disconnect appliances when not in use
  - 4. Inspect all electrical equipment regularly
  - 5. Never overload outlets
  - 6. Avoid contact with water and metal
  - 7. Keep hands dry
  - 8. Do not leave client unattended when connected to electricity
  - 9. Contain electrical cords for safety
  - 10. Do not clean around outlets when appliances are plugged in
  - 11. Do not touch two metal objects together if one is plugged in
  - 12. Do not twist electrical cords or step on them
  - 13. Disconnect by pulling plug not cord
  - 14. Do not repair appliances unless qualified
  - 15. Do not use faradic or sinusoidal currents if pain or discomfort is caused, skin is very red, client has gold-filled teeth, has high blood pressure, broken skin, or pustular skin
  - 16. Do not use tesla high frequency current on clients who are pregnant, have seizures or asthma, high blood pressure, sinus blockage, pacemaker, or metal implants
  - 17. Do not use vibrator on client with heart disease, fever, abscess, or inflammation
  - 18. Protect eyes
    - a. Stylist wears safety goggles for UV rays
    - b. Client wears cotton pads saturated with boric acid, witch hazel, or distilled water

## UNIT E ARTIFICIAL HAIR

### 6.00 Uses of artificial hair

#### 6.01 Reasons worn

- A. Reasons artificial hair is worn
  - 1. Personal choice
  - 2. Medical
  - 3. Fashion
  - 4. Practicality
- B. Types of artificial hair
  - 1. Human
    - a. Advantages
      - (1) Custom-colored
      - (2) Permed
      - (3) Tolerant of heat
      - (4) Style with curling iron
      - (5) Blow dry
    - b. Disadvantages
      - (1) May frizz
      - (2) Must be reset
      - (3) Color will oxidize
      - (4) Hair breaks
  - 2. Synthetic
    - a. Advantages
      - (1) Set stays in hair
      - (2) Cut in latest style
      - (3) Color unlimited
      - (4) Color does not fade
    - b. Disadvantages
      - (1) Cannot tolerate extreme heat
      - (2) Coloring not recommended
      - (3) Look unnatural
- C. Quality
  - 1. Human hair
  - 2. Human or animal hair
- D. Types of wigs
  - 1. Cap
  - 2. Capless
  - 3. Toupees (for men)
- E. Wig construction
  - 1. Hand-tied
  - 2. Hand-knotted
  - 3. Semi-hand tied
  - 4. Machine-made

- 6.02 Wig measurements, blocking, and fitting
  - A. Wig measurements
    - 1. Circumference
    - 2. Middle front hairline to nape
    - 3. Ear to ear across
    - 4. Ear to ear over top of head
    - 5. Width of nape line
  - B. Fitting
    - 1. Adjusting to a larger size
    - 2. Adjusting to a smaller size (horizontal and vertical tucks and darts)
    - 3. Elastic band
  - C. Putting on wig
    - 1. From forehead to nape
    - 2. Hold edge in front
    - 3. Adjust
    - 4. Pin wig
  - D. Blocking
    - 1. Use canvas head form and T-pins
    - 2. Cork or styrofoam storage
    - 3. Cover canvas block with plastic
- 6.03 Ordering, cleaning, shaping, styling, and coloring
  - A. Cleaning
    - 1. Human hair
      - a. Follow manufacturers' directions
      - b. Use liquid cleaner
      - c. Clean every 2-4 weeks
      - d. Use canvas block covered with plastic
      - e. Tepid water temperature
    - 2. Synthetic
      - a. Clean every 6-12 weeks
  - B. Coloring
    - 1. Do not use metallic dyes
    - 2. Do not bleach
    - 3. Use semi-permanent color
    - 4. Demi permanent
    - 5. Glaze, rinse, color, or mousse
  - C. Hair pieces
    - 1. Fashion hairpieces
    - 2. Wiglets
    - 3. Cascades
    - 4. Falls
    - 5. Switch
    - 6. Chignon
    - 7. Braids

- D. Hair extensions
  - 1. Tracks
  - 2. Sew
  - 3. Fusion
  - 4. Bonding
  - 5. Lock stitch
- E. Hair additions
  - 1. Off the scalp braiding
  - 2. On the scalp braiding
- F. Sanitation
  - 1. Wear gloves
  - 2. Sanitize all tools
- G. Setting and styling
  - 1. Difference from hair on head
  - 2. Pin curls for closeness
  - 3. Rollers
  - 4. Curling iron

## **UNIT F ANATOMY AND PHYSIOLOGY**

### 7.00 Basic structures and systems of body

#### 7.01 Human cells and tissues

- A. Cells
  - 1. Composition of cells
    - a. Nucleus
    - b. Cytoplasm
    - c. Cell membrane
  - 2. Cell growth
  - 3. Metabolism
    - a. Anabolism
    - b. Catabolism
    - c. Homeostasis (balance of body systems)
- B. Tissues
  - 1. Connective
  - 2. Muscular
  - 3. Nerve
  - 4. Epithelial
  - 5. Liquid

7.02 Body organs and systems

A Organs

1. Brain
2. Eyes
3. Heart
4. Lungs
5. Stomach and intestines
6. Liver
7. Kidney
8. Skin

B. Types

1. Integumentary
2. Skeletal
3. Muscular
4. Nervous
5. Circulatory
6. Endocrine
7. Excretory
8. Respiratory
9. Digestive
10. Reproductive

C. Skeletal system

1. Osteology
2. Composition of bone
  - a. One-third animal matter
  - b. Two-thirds mineral matter
3. Primary functions of bones
4. Bones of skull
  - a. Cranium
    - (1) Frontal
    - (2) Parietal
    - (3) Occipital
    - (4) Temporal
  - b. Face
    - (1) Mandible
    - (2) Maxillar
    - (3) Nasal
    - (4) Zygomatic
    - (5) Iacrimonal
  - c. Neck
    - (1) Cervical vertebrae
    - (2) Hyoid

- d. Chest (thorax)
    - (1) Thorax
    - (2) Thoracic vertebrae (spine)
    - (3) Sternum
    - (4) Ribs
    - (5) Clavicle
    - (6) Scapula
  - e. Shoulders, arm, and hand
    - (1) Humerus
    - (2) Radius
    - (3) Ulna
    - (4) Carpals
    - (5) Metacarpals
    - (6) Phalanges
- D. Muscular system
- 1. Composition
    - a. Origin, insertion, belly of muscle
    - b. Types of muscular tissue
      - (1) Striated
      - (2) Nonstriated
      - (3) Cardiac
  - 2. Muscles affected by massage
    - a. Scalp
      - (1) Epicranium/occipito frontalis
      - (2) Aponeurosis
        - (a) Frontalis
        - (b) Occipitalis
    - b. Ear
      - (1) Auricularis anterior
      - (2) Auricularis superior
      - (3) Auricularis posterior
    - c. Eye and nose
      - (1) Corrugator
      - (2) Levator palpebrae superioris
      - (3) Orbicularis oculi
      - (4) Procerus
    - d. Mouth
      - (1) Oris orbicularis
      - (2) Quadratus labii superioris
      - (3) Quadratus labii inferioris
      - (4) Mentalis
      - (5) Risorius
      - (6) Caninus
      - (7) Triangularis
      - (8) Zygomaticus
      - (9) Buccinator

- e. Mastication
    - (1) Temporalis
    - (2) Masseter
  - f. Neck and upper back
    - (1) Platysma
    - (2) Sternocleidomastoideus
    - (3) Trapezius
    - (4) Latissimus dorsi
  - g. Shoulder, chest, and arm
    - (1) Pectoralis
    - (2) Serratus anterior
    - (3) Deltoid
    - (4) Bicep
    - (5) Tricep
    - (6) Supinator
    - (7) Pronator
    - (8) Flexor
    - (9) Extensor
  - h. Hand
    - (1) Abductor
    - (2) Adductor
    - (3) Opponens/opponent
- E. Nervous system
1. Functions
  2. Divisions
    - a. Central
    - b. Peripheral
    - c. Autonomic
  3. Brain and spinal cord
    - a. Brain
    - b. Spinal cord
  4. Nerve cell structure and function
    - a. Neuron
      - (1) Cell body and nucleus
      - (2) Dendrites
      - (3) Axon
    - b. Nerves and types
      - (1) Sensory/afferent
      - (2) Motor/efferent
      - (3) Mixed
      - (4) Reflex

5. Nerves of head, face, and neck
  - a. Fifth cranial nerve
    - (1) Branches
      - (a) Ophthalmic
      - (b) Mandibular
      - (c) Maxillary
    - (2) Branches affected by massage
      - (a) Auriculotemporal
      - (b) Infraorbital
      - (c) Infraorbital
      - (d) Mental
      - (e) Nasal
      - (f) Supraorbital
      - (g) Supratrochlear
      - (h) Zygomatic nerve
  - b. Seventh cranial nerve (facial nerve)
    - (1) Posterior auricular nerve
    - (2) Temporal
    - (3) Zygomatic
    - (4) Buccal
    - (5) Mandibular
    - (6) Cervical nerves
      - (a) Greater occipital
      - (b) Smaller (lesser) occipital
      - (c) Greater auricular
      - (d) Cervical cutaneous
  - c. Nerves of the hand and arm
    - (1) Digital nerve
    - (2) Radial nerve
    - (3) Median nerve
    - (4) Ulnar
- F. Circulatory system
  1. Divisions
    - a. Blood vascular
    - b. Lymph vascular
  2. Heart
    - a. Pericardium
    - b. Size/weight
    - c. Vagus
    - d. Autonomic/sympathetic
    - e. Normal beats per minute (72 to 80)

- f. Heart chambers
  - (1) Right atrium/left atrium
  - (2) Right ventricle/left ventricle
  - (3) Valves
  - (4) Pulmonary circulation
  - (5) Systematic circulation
- 3. Blood vessels
  - a. Arteries
  - b. Capillaries
  - c. Veins
- 4. Blood composition
  - a. Red and white corpuscles
  - b. Platelets
  - c. Plasma
  - d. Hemoglobin
- 5. Chief functions of blood
  - a. Carries oxygen, food, and secretions to all cells of the body
  - b. Carries away carbon dioxide and waste products
  - c. Helps to equalize the body's temperature
  - d. Aids in protection from harmful bacteria and infections through the action of the white blood cells
  - e. Closes injured minute blood vessels by forming clots, thus preventing blood loss
- 6. Lymph vascular system
  - a. Lymph
    - (1) Colorless
    - (2) Watery fluid
  - b. Functions
    - (1) Acts as an aid to the blood system
    - (2) Reaches parts of the body not reached by blood and carries an interchange with the blood
    - (3) Carries nourishment from the blood and the body cells
    - (4) Acts as a bodily defense
    - (5) Removes waste material
    - (6) Provides a suitable fluid environment
- 7. Arteries of the head and face
  - a. Common carotid arteries
    - (1) Main sources of blood supply to head, face, and neck
    - (2) Location
    - (3) Internal division
    - (4) External division

- b. Facial artery (external maxillary)
  - (1) Supplies blood to lower region of the face, mouth, and nose
  - (2) Branches
    - (a) Submental artery: supplies blood to chin and lower lip
    - (b) Inferior labial: supplies blood to the lower lip
    - (c) Angular: supplies blood to the side of the nose
    - (d) Superior labial artery: supplies blood to the upper lip, and wing of the nose
- c. Superficial temporal artery
- d. Veins of face and neck
  - (1) Internal jugular
  - (2) External jugular
  - (1) Functions
    - (a) Continuation of the external carotid artery
    - (b) Supplies muscles, skin, scalp, and the front, side, and top of the head
  - (2) Branches
    - (a) Frontal: supplies blood to the forehead
    - (b) Parietal: supplies blood to the crown and side of the head
    - (c) Transverse – supplies blood to the masseter
    - (d) Middle temporal – supplies blood to the temples
    - (e) Anterior auricular – supplies blood to the anterior part of the ear that travels through small tube-like ducts
    - (f) Blood supply to arm and hand
      - i. Ulnar artery
      - ii. Radial artery

G. Endocrine system

- 1. Endocrine glands
  - a. Ductless
  - b. Release secretions called hormones directly into the blood stream
  - c. Stimulate functional activity or secretion in other parts of the body
    - (1) Sebaceous gland
      - (a) Sebum/oil
      - (b) Duct glands

- H. Excretory system
  - 1. Function
  - 2. Composition
    - a. Kidneys
    - b. Liver
    - c. Skin
    - d. Large intestine
    - e. Lungs
- I. Respiratory system
  - 1. Location
  - 2. Composition
    - a. Lungs
    - b. Air passages
    - c. Breathing cycle
      - (1) Exchange of gases
      - (2) Inhalation
      - (3) Exhalation
- J. Digestive system/gastrointestinal system
  - 1. Function
  - 2. Process of digestion
    - (a) Mouth
    - (b) Pharynx
    - (c) Esophagus
    - (d) Stomach
    - (e) Small intestine
    - (f) Absorbed into blood stream
    - (g) Large intestine
    - (h) Eliminated through anal canal
    - (i) Process takes about nine hours
- K. Functions of enzymes

## UNIT G CHEMISTRY

### 8.00 Chemical principles

#### 8.01 Organic and inorganic chemistry

##### A. Organic

- 1. Carbon, will burn
- 2. Examples
  - a. All living things
  - b. Plants and animals
  - c. Gasoline
  - d. Motor oil
  - e. Plastic
  - f. Synthetic fabric
  - g. Soap and detergent
  - h. Trees

- B. Inorganic
    - 1. No carbon, will not burn
    - 2. Examples
      - a. Metal
      - b. Minerals
      - c. Pure water
      - d. Clean air
  - C. Matter
    - 1. Forms
      - a. Solid
      - b. Liquid
      - c. Gas
    - 2. Chemical and physical change
    - 3. Elements
      - a. Simplest form of matter
      - b. Identified by letter symbols
    - 4. Atoms
      - a. Protons
      - b. Neutrons
      - c. Electrons
    - 5. Molecules
- 8.02 Chemical bonds of hair and chemical services
- A. Polypeptide chain/keratin protein/element
    - 1. Amino acids/cystiene
    - 2. End bonds/peptide bonds
    - 3. Side bonds
      - a. Physical
        - (1) Hydrogen
        - (2) Salt
        - (3) Van de Waal's forces
      - b. Chemical
        - (1) Disulfide
        - (2) Sulfur bonds = S-S
    - 4. Five elements of hair
      - a. Carbon
      - b. Oxygen
      - c. Hydrogen
      - d. Nitrogen
      - e. Sulfur
  - B. Permanent waving
    - 1. Alkaline wave/cold wave
      - a. Without heat and tension
      - b. Ammonium thioylycolate

2. Acid wave/heat wave
  - a. With heat and tension
  - b. Glycerylmonothioglycolate
  - c. Endothermic
  - d. Exothermic
3. Neutralizers
  - a. Hydrogen peroxide
  - b. Sodium bromate
  - c. Sodium perborate
- C. Relaxers
  1. Sodium hydroxide (pH 12-14)
  2. Ammonium thioglycolate (pH 8.8-14)
- D. Curl reformation/soft curl
  1. Chemical rearranger
  2. Processing
  3. Neutralizing
- E. Hair coloring
  1. Nonoxidative color
    - a. Temporary
    - b. Semi-permanent
  2. Oxidative color
    - a. Long-lasting semi-permanent/demi-permanent
    - b. Permanent hair color
      - (1) Paraphenylenediamine
      - (2) Paratouenediaamine
  3. Vegetable, metallic, and compound dyes
- F. Lighteners/bleach
  1. Bleaching or decolorizing on scalp
    - (a) Oil lighteners
    - (b) Cream lighteners
- G. Developers/hydrogen peroxide
  1. Hydrometer
  2. Shelf life three years
- H. Cosmetic ingredients
  1. Moisturizers
  2. Preservatives
  3. Thickeners
  4. Solvents
  5. Emulsifiers
  6. Thickeners
  7. Solvents
  8. Emulsifiers
  9. Color additives

- 8.03 pH scale
- A. Potential hydrogen
  - B. Scale 0-14
    - 1. Alkaline above 7
    - 2. Acid below 7
    - 3. Neutral 7
  - C. Nitrozone and litmus paper used for testing on wet surfaces
  - D. pH balance
    - 1. 4.5-5.5 hair, skin, and nails
  - E. Chemical composition of cosmetics
    - 1. Classifications
      - a. Solutions
      - b. Suspensions
      - c. Mulsions
      - d. Ointments
      - e. Soaps
      - f. Powders
    - 2. Water
      - a. Universal solvent
      - b. Hard or soft
    - 3. Shampoo
      - a. Shampoo molecule
        - (1) Hydrophilic
        - (2) Lipophilic
      - b. Types
        - (1) All-purpose
        - (2) Acid balanced
        - (3) Plain
        - (4) Soapless
        - (5) Clarifying
        - (6) Anti-dandruff
        - (7) Liquid dry
        - (8) Powder dry
        - (9) Conditioning
        - (10) Color
        - (11) Medicated
        - (12) For thinning hair
      - c. Rinses and conditioners
        - (1) Types
          - (a) Instant
          - (b) Normalizing
          - (c) Body building/protein
          - (d) Moisturizing
          - (e) Customized

- (2) Ingredients
  - (a) Protein
  - (b) Vegetable
  - (c) Quats
  - (d) Dimethicones
  - (e) Fatty alcohol

## UNIT H SALON MANAGEMENT

### 9.00 Establishing a salon

#### 9.01 Laws and regulations

##### A. Physical site

##### 1. Location

- a. Near other businesses
- b. Good business flow
- c. Visibility
- d. Parking issues
- e. Relationship to competition

##### 2. Rental

##### a. Lease

- (1) Time period
- (2) Responsibility for capital improvements
- (3) Responsibility for maintenance and repairs
- (4) Responsibility for normal equipment for building

##### b. Cost

- (1) Fixed
- (2) Variable

##### B. Laws

##### 1. Local

- a. City
- b. County

##### 2. Federal

- a. Social security
- b. Unemployment compensation or insurance
- c. Cosmetic and luxury taxes
- d. OSHA requirements
- e. Workers' Compensation

##### 3. State

- a. Sales tax
- b. Licenses
- c. Employee compensation

##### 4. Income tax

- a. State
- b. Federal

##### 5. Use of lawyer

- C. Insurance
  - 1. Malpractice
    - a. Stylist
    - b. Owner
    - c. Others
  - 2. Property or premise insurance
    - a. Salon equipment
    - b. Physical location (natural disaster)
    - c. Fire
    - d. Theft or burglary
    - e. Accidents occurring at business
    - f. Replacement of lost items
    - g. Liability clause
  - 3. Product liability (use at home)
  - 4. Workers' compensation (state-controlled)
- D. Types of ownership
  - 1. Sole proprietorship
    - a. One owner
    - b. Responsible for
      - (1) Profit
      - (2) Loss
  - 2. Partnerships: two more people
    - a. Ownership shared
    - b. Expenses and profits shared
    - c. Decision-making shared
    - d. Liabilities shared
  - 3. Corporation: shareholders
    - a. Board of directors
    - b. Share profits
    - c. Not responsible for debts
  - 4. Franchise
    - a. Operating agreement
    - b. Fee paid to parent corporation to provide
      - (1) Fixtures
      - (2) Promotions
      - (3) Advertising
      - (4) Education
      - (5) Management techniques

- 9.02 Personal and financial aspects
  - A. Self-appraisal
    - 1. Recognize trends
    - 2. Good communication
    - 3. Accept criticism
    - 4. Self-control
    - 5. Good management
    - 6. Keep records
    - 7. Set prices
    - 8. Set business goals
  - B. Personal financial statement/net worth
    - 1. Assets
      - a. House
      - b. Vehicles
      - c. Jewelry, gold, and silver
      - d. Collectibles
      - e. Life insurance
      - f. Savings, checking, and cash
      - g. Stocks and bonds
    - 2. Liabilities
      - a. Loan balances
      - b. Credit card balances
  - C. Income and expenses
    - 1. Income
      - a. Services
      - b. Products
    - 2. Expenses
      - a. Salaries: 50%
      - b. Rent: 12%
      - c. Supplies: 5%
      - d. Advertising: 3%
      - e. Utilities: 2%
      - f. Insurance: 1.5%
      - g. Employee benefits: 1.5%
      - h. Maintenance
      - i. Cost of doing business: 2%
      - j. Services of debt: 5%
      - k. Depreciation: 3%
      - l. Miscellaneous: 1%
- 9.03 Record keeping
  - A. Purposes
    - 1. Determine profit/loss
    - 2. Assess salon value
    - 3. Arrange financing
    - 4. Income tax

- B. Weekly records
  - 1. Compare with other years
  - 2. Note changes in demand for services
  - 3. Use of supplies
  - 4. Control expenses and waste
- C. Daily records
  - 1. Cost of operation
  - 2. Daily record slips
- D. Purchase and inventory
  - 1. Maintain stock
  - 2. Used for net worth
- E. Service
  - 1. Treatments given
  - 2. Merchandise sold
- F. Loan
  - 1. Amounts
  - 2. Dates due

10.00 Salon operations

10.01 Physical layout and operations

- A. Considerations
  - 1. Operational services
    - a. Appealing/color scheme
    - b. Comfortable/reception area
    - c. Telephone system
    - d. Dressing area
    - e. Retail merchandise
    - f. Business cards
    - g. Financial transactions
    - h. Aisle space (see relevant law)
    - i. Dispensary
    - j. Storage
    - k. Equipment
  - 2. Other considerations
    - a. Rest rooms with handicap access
    - b. Lighting and plumbing
    - c. Air conditioning and heating
    - d. Changing area
    - e. Break area
- B. Operations
  - 1. Hiring staff
    - a. Personality
    - b. Skill level and experience
    - c. Personal appearance
    - d. Client base

2. Pricing
  - a. Relative to income of clients
  - b. List posted
  - c. Provided to each operator
3. Employee compensation
  - a. Commission
  - b. Salary
  - c. Salary plus commission
4. Telephone
  - a. Booking appointments
    - (1) Stylist information
      - (a) Stylist name
      - (b) Service requested
    - (2) Time and date
    - (3) Client's name
    - (4) Client's phone number
    - (5) Request visit for analysis before chemical service
  - b. Use of telephone
    - (1) Appointments
    - (2) New business/client retention
    - (3) Reminder calls
    - (4) Answer questions
    - (5) Complaints
    - (6) Messages
    - (7) Ordering
    - (8) Pay phone use
  - c. Telephone operator
    - (1) Speak clearly in pleasant voice
    - (2) Correct grammar
    - (3) Friendly
    - (4) Polite, respectful, courteous
    - (5) Tactful and concerned
  - d. Incoming calls
    - (1) Answer within two rings
    - (2) Client greeting
    - (3) Listening for information
    - (4) Repeat details of booking back to client
    - (5) Putting client on hold
    - (6) Details required for messages
  - e. Telephone complaints
    - (1) Tactful and courteous
    - (2) Voice tone
    - (3) Listening
    - (4) Resolution
    - (5) Salon policy

- f. Advertising
  - (1) Word of mouth
  - (2) Television
  - (3) Newspaper
  - (4) Mail
  - (5) Radio
  - (6) Classified ads

## 10.02 Retailing principles

- A. Selling principles
  - 1. Familiarity with products and services
  - 2. Meet needs of client
  - 3. Generate interest/desire
  - 4. Self-confident and tactful
  - 5. Do not underestimate client
  - 6. Demonstrate product on client
  - 7. Closing the sale
  - 8. Assuring client
- B. Psychology of selling
  - 1. Display
    - a. Organized by category
    - b. Best selling products and sizes at eye level
    - c. Island shelving
    - d. Rotate stock and rearrange to keep interest
    - e. Display location
    - f. Facing client on edge of shelf
    - g. Clean and neat
    - h. Lighting
  - 2. Pricing
    - a. Individually
    - b. Easy to see
  - 3. Promotional displays
    - a. Labeling
    - b. Availability of literature
    - c. Use of display experts
  - 4. Inventory control
    - a. Form
    - b. Timely and controlled
    - c. Quantity
- C. Buyers
  - 1. Types
    - a. Ready
    - b. Logical
    - c. Emotional
    - d. Bargain
    - e. Stubborn

2. Motivation
    - a. Need
    - b. Desire to look better
    - c. Profit or gain
    - d. Impulse
- D. Clients
1. Types
    - a. Shy, timid
    - b. Talkative
    - c. Nervous/irritable
    - d. Inquisitive/over-cautious
    - e. Know-it-all
    - f. Teenagers
    - f. Mature
    - g. Children
  2. Client satisfaction
    - a. Determine client needs
    - b. Explain finished look/suggest alternative styles
    - c. Explain price and upkeep
    - d. Explain product applications
    - e. Suggest additional services/introduce change
    - f. Show respect
    - g. Give client your time
    - h. Respect the client's time