

# STRANDS AND STANDARDS

## DENTAL ASSISTANT



### Course Description

An instructional program that prepares individuals to assist a dentist or dental hygienist performing the functions of a dental practice. Includes instruction in chairside assisting, patient preparation, front office functions, selected dental office laboratory procedures, and an introduction to radiology.

<b>Intended Grade Level</b>	12
Units of Credit	2.0
Core Code	36.01.00.00.020
Concurrent Enrollment Core Code	N/A
Prerequisite	N/A
Skill Certification Test Number	720, 721, 722, 723
Test Weight	1.0
<b>License Type</b>	CTE and/or Secondary Education 6-12
<b>Required Endorsement(s)</b>	
Endorsement 1	Dental Endorsement
Endorsement 2	N/A
Endorsement 3	N/A

## DENTAL SCIENCE I-CORE STRANDS, STANDARDS, and INDICATORS

### STRAND 1

**Students will examine the field of dentistry.**

#### Standard 1

Identify the important contributions of the following people to the field of dentistry:

- G.V. Black-Grand Old Man of Dentistry
- Wilhelm Conrad Roentgen-discovered potential of x-ray beam
- C. Edmund Kells-employed the first dental assistant
- Pierre Fauchard-Father of Modern Dentistry
- Horace Wells-use of nitrous oxide for relief of dental pain
- Paul Revere-1st forensic dentist
- Ida Gray-Rollins-1st African American woman to earn a formal DDS degree
- Emeline Robert Jones-1st woman to establish a regular dental practice in the U.S.
- Malvina Cueria-1st female dental assistant
- Irene Newman-1st dental hygienist
- Lucy B. Hobbs-Taylor-1st female graduate of dental school
- Juliette A. Southard-founded American Dental Assistant's Association

#### Standard 2

Describe the following dental health team members (including educational requirements, professional organizations, responsibilities, and licensure):

- Dentist
- Dental Hygienist
- Dental Assistant
- Administrative Assistant
- Dental Laboratory Technician

#### Standard 3

Describe the following areas of specialization in dentistry:

- Dental Public Health
- Endodontics
- Oral & Maxillofacial Radiology
- Oral & Maxillofacial Surgery
- Oral Pathology
- Orthodontics
- Pediatric Dentistry
- Periodontics
- Prosthodontics

## Standard 4

Describe the characteristics of a professional dental assistant.

- Professional appearance
- Teamwork
- Attitude
- Dedication
- Responsibility
- Initiative
- Confidentiality
- Personal qualities

## Standard 5

Identify professional work habits.

- Courtesy and respect for patients and team members
- Attendance of work hours
- Professional communication (grammar)
- Team work
- Problem solving

## Standard 6

Outline methods for helping patients feel comfortable before, during, and after treatment.

## Standard 7

Explain patient confidentiality.

## Standard 8

Describe communication with patients including telephone, special needs patients, and team members.

## Standard 9

Demonstrate professional appearance, hygiene, dental health, and behaviors.

## STRAND 2

**Students will identify areas of the dental office and basic dental equipment.**

### Standard 1

Identify and describe the following areas of the dental office:

- Dental Operatory (treatment area)
- Reception area
- Administration/Business area
- Sterilization area
- Dental laboratory
- Dentist's private office
- Consultation room

- Dental staff lounge

### Standard 2

Identify and describe proper use and maintenance of the following equipment:

- Operator stool
- Assistant stool
- Dental chair
- Operating light
- Air water syringe
- Oral evacuation system
- Curing light
- Amalgamator
- Rheostat (foot control)
- X-ray systems

### Standard 3

Outline basic morning and evening routines.

## STRAND 3

**Students will demonstrate an understanding of appropriate ethical and legal behavior in a dental setting.**

### Standard 1

Define the difference between ethics and laws including the importance of professional and personal ethics in the workplace.

### Standard 2

Discuss ethical and legal responsibilities for the dental healthcare worker.

### Standard 3

Identify standards of the Health Insurance Portability and Accountability Act/HIPAA and discuss the need to protect the patient's privacy.

### Standard 4

Explain the purpose of the State Dental Practice Act and how it applies to the role of the dental assistant. List and understand the levels of supervision.

### Standard 5

Discuss the role of the dental assistant in recognizing and reporting domestic violence neglect, and child abuse.

## STRAND 4

**Students will demonstrate personal safety procedures based on OSHA and CDC guidelines.**

### Standard 1

Outline the Centers for Disease Control & Prevention guidelines and identify components of a written exposure control plan.

### Standard 2

Explain the OSHA Bloodborne Pathogen Standard including:

- Training requirements
- Employee medical records
- Exposure protocol

### Performance Skills

Demonstrate proper use of PPE and correct handwashing technique.

### Standard 4

Outline the OSHA Hazard Communication Standard including:

- Training program
- Chemical inventory
- Locate OSHA posters and SDS sheets on site

## STRAND 5

**Students will demonstrate infection control protocol.**

### Standard 1

Identify methods of disease transmission including chain of infection and modes of transmission in the dental office.

### Standard 2

### Performance Skills

Obtain Hepatitis B vaccination or provide signed declination form.

### Standard 3

Outline standards for prevention of disease transmission.

- Prevent cross contamination
- Maintain aseptic conditions

### Standard 4

Waste disposal.

### Standard 5

### Performance Skills

Know chemicals and methods used for sterilization and the purposes of sterilization.

## Standard 6

### Performance Skills

Perform disinfection procedures. Know chemicals and methods used for disinfection and the purposes of sterilization.

## STRAND 6

**Oral Anatomy. Students will identify intra-oral anatomy and surrounding structures.**

### Standard 1

Identify teeth by name, location, and permanent, primary, or mixed dentition.

### Standard 2

Identify anatomical parts, tissues, and surfaces of a tooth.

### Standard 3

Identify supporting structures.

- Periodontal ligaments
- Alveolar bones
- Gingiva
- Cementum

### Standard 4

Identify primary and permanent teeth using the Universal Tooth Numbering System.

### Standard 5

Identify major landmarks of the oral cavity and surrounding structures.

- Maxillary sinus
- Salivary glands and ducts
- Maxilla
- Mandible
- TMJ
- Incisive papilla
- Rugae
- Uvula
- Frenulum
- Soft palate
- Hard palate
- Tongue
- Teeth
- Oral mucosa
- Gingival tissue
- Temporal bone
- Trigeminal nerve

### Standard 6

Describe genetic and developmental factors that can affect dental development.

- Tori
- Geographic tongue
- Fissure tongue
- Supernumerary
- Enamel dysplasia
- Cleft palate
- Cleft lip
- Tongue-tied
- Andontia
- Microdontia
- Macrodontia

## STRAND 7

**Students will identify the infectious process of dental caries and other diseases of the oral cavity.**

### Standard 1

Outline the dental caries process:

- Acids in plaque and saliva attack the tooth
- Calcium and phosphate are dissolved from the enamel (demineralization)
- Fluoride, calcium and phosphate are re-deposited into the tooth (remineralization)

### Standard 2

Describe the clinical characteristics of gingivitis:

- Red tissues
- Swollen tissues
- Tissues bleed easily

### Standard 3

Recognize the diseases/conditions of the oral cavity and tongue including:

- Oral cancer
- Candidiasis (thrush)
- Cellulitis
- Fissured tongue
- Geographic tongue
- Glossitis
- Herpes

### Standard 4

Identify the effects of methamphetamine use.

- “Meth Mouth” is the common term for the effects of methamphetamine use and results in rampant decay on the buccal surface and in the interproximal areas of the anterior teeth.

### Standard 5

Describe the oral conditions of a patient with eating disorders.

- Bulimia-severe wear on the lingual surface of the teeth caused by stomach acid from repeated vomiting.
- Anorexia Nervosa-the strength of the teeth and the health of the gingival tissues are reduced, because of the lack of calcium and other nutrients.

## STRAND 8

**Students will identify components of a comprehensive preventive dentistry program.**

### Standard 1

Explain the parts of a preventive dentistry program.

- Nutrition
- Patient education
- Plaque control
- Fluoride therapy
- Dental check-ups

### Standard 2

Identify different products used for oral hygiene and their uses.

- Toothbrushes
- Dental floss/tape
- Interdental aids
- Toothpastes
- Mouth rinses

### Standard 3

Outline techniques for educating patients in oral hygiene.

- Tooth brushing methods-Bass
- Flossing
- Disclosing

### Standard 4

#### Performance Skills

Instruct a patient in preventive education and oral hygiene instruction.

### Standard 5

Explain how diet and nutrition can affect oral conditions.

- Dental decay is directly linked to the presence of dietary sugars (sucrose) in the diet. Sucrose is highly cariogenic and can be found in many foods. A dental assistant



needs to be able to recognize the pattern of decay and counsel with the patient on their nutritional choices.

### Standard 6

Analyze the six areas of the My Plate diagram.

- Grains
- Vegetables
- Fruits
- Oils
- Milks
- Meat/beans

## STRAND 9

**Students will be able to perform the skills and responsibilities of a dental assistant in the front office.**

### Standard 1

Discuss and apply oral communications.

- Words
- Facial expressions
- Appearance
- Gestures
- Mannerisms
- Listening skills
- Voice inflection
- Attitudes
- Actions

### Standard 2

Demonstrate good phone courtesy.

- Smile
- Don't chew gum or eat
- Speak directly into the receiver
- Speak clearly and slowly
- Answer promptly
- Greet patient-identify yourself and the practice
- Ask how you can help the caller

### Standard 3

Identify the differences between verbal and nonverbal communications.

- Verbal-words spoken
- Non-verbal-body language

## Standard 4

Discuss the importance of understanding cultural diversity in the dental office.

- Race
- Gender
- Cultural heritage
- Age
- Physical abilities
- Spiritual beliefs

## Standard 5

Outline the process of scheduling appointments.

- Guidelines for scheduling-units of time
- Confirmation of appointments
- Re-call

## Standard 6

Identify the functions of computerized practice management systems and manual bookkeeping practices.

## Standard 7

Identify the data gathering process and prepare a patient record.

- Registration form
- Medical-dental health history form
- Clinical examination form
- Progress note form

## Standard 8

Describe how to use the following filing systems:

- Alphabetic
- Numeric
- Cross-reference
- Chronologic

## Standard 9

Define terminology related to insurance.

- Assignment of benefits
- Carrier
- Co-insurance
- Deductible
- Dependent
- Eligibility
- Exclusions
- Maximum
- Provider

- Subscriber

### Performance Skills

Prepare a patient record.

## STRAND 10

**Students will be able to perform basic life support skills.**

### Standard 1

Describe the signs and symptoms of a common medical emergency and describe how to respond to them.

- Symptom-what a patient tells you regarding how they feel
- Sign-what you observe in a patient
- Common emergencies include:
  - Airway obstruction/choking
  - Syncope/fainting
  - Postural hypotension
  - Angina/chest pain
  - Acute myocardial infarction/heart attack
  - Stroke/CVA
  - Hyperventilation
  - Asthma attack
  - Allergic reaction
  - Seizure
  - Diabetic shock
  - Hyperglycemia
  - Hypoglycemia

### Standard 2

Demonstrate how to treat syncope.

### Standard 3

Demonstrate how to treat postural hypotension.

### Standard 4

### Performance Skills

Obtain current CPR certification.

## DENTAL SCIENCE II-CORE STRANDS, STANDARDS, and INDICATORS

### STRAND 1

**Students will be able to perform the skills and responsibilities expected of a dental assistant in a dental examination.**

#### Standard 1

Describe the role of the dental assistant in the clinical examination.

#### Standard 2

##### Performance Skills

Receive patients and prepare room for treatment.

#### Standard 3

Take, record, and monitor vital signs using automated systems:

- Blood pressure
- Pulse

#### Standard 4

##### Performance Skills

Chart existing restorations or conditions.

#### Standard 5

Explain the importance of a treatment plan.

- Treatment plan is a compilation of clinical findings and oral diagnosis by a dentist, in an outlined format for presentation purposes.
- The treatment plan must be presented and accepted by the patient before treatment is rendered.

#### Standard 6

##### Performance Skills

Maintain field of operation during dental procedures.

#### Standard 7

Explain the difference between an oral prophylaxis and coronal polishing.

- Oral prophylaxis-the complete removal of calculus, debris, stain, and plaque from the teeth.
- Coronal polish/rubber cup polish-a technique used to remove plaque and stains from the crown of the tooth.

#### Standard 8

Demonstrate safety precautions to be followed during coronal polish.

- Operator and patient positioning
- Polishing/bristle cups

- Polishing paste
- Proper handpiece grasp/fulcrum
- Proper handpiece operation
- Polishing strokes

### Standard 9

#### Performance Skills

Perform coronal polish.

### Standard 10

Outline the methods of fluoride therapy.

- Systemic
- Topical

### Standard 11

#### Performance Skills

Apply topical fluoride

### Standard 12

Maintain records in accordance with legal guidelines.

- Black ink
- Date
- Tooth number
- Surfaces of tooth
- Procedure performed
- All important information pertaining to treatment rendered
- Signature of individual who made the entry

### Standard 13

#### Performance Skills

Record the examination in patient record.

### Standard 14

Demonstrate how to correct an error on the patient chart.

## STRAND 2

**Students will demonstrate patient and operator protection, infection control procedures, expose and process, evaluate, mount, and label dental x-rays.**

### Standard 1

Explain to a patient the benefits of dental x-rays.

- Detect decay between the teeth in its early stages.
- Detect bone loss around the teeth.

- Detect periapical abscess.
- Detect impacted teeth.
- Evaluate patient growth and development.
- Document existing oral conditions.
- Obtain information during dental procedures.

### Standard 2

Identify types of intraoral and extraoral radiographs and the purpose of each.

- Intraoral
  - Bitewing x-rays-shows crowns of both upper and lower teeth; for decay detection.
  - Periapical x-rays-used to show crown, root tip, and surrounding area to diagnose abscesses.
  - Occlusal x-rays-used to examine large areas of the jaws to identify impactions or pathological conditions.
- Extraoral
  - Panoramic x-rays-shows entire upper and lower jaw; used to locate impacted teeth, tooth eruption patterns, and lesions in the jaw.
  - Cephalometric x-rays-shows the bones and soft tissues of the facial profile; used in orthodontics.

### Standard 3

Identify the components of the dental x-ray machine and their use.

- Tubehead
- Extension arm
- Control panel

### Standard 4

Demonstrate methods of radiation protection for the patient during x-ray exposure.

- Take only those radiographs prescribed by the dentist.
- Use equipment that is properly maintained.
- Use the fastest speed of dental film to limit exposure time.
- Use proper film exposure techniques including use of film-holding devices.
- Use lead aprons and thyroid collars for all patients.

### Standard 5

Demonstrate methods of radiation protection for the operator during x-ray exposure.

- Never stand directly in front of the x-ray tube head.
- Always stand at least 6 feet from the x-ray unit, or behind a wall, during exposure.
- Use radiation monitoring to protect the operator.

### Standard 6

Demonstrate infection control during x-ray procedures.

## Standard 7

### Performance Skills

Assemble the XCP instrument.

## Standard 8

### Performance Skills

Demonstrate techniques for intraoral x-rays.

- Paralleling technique
- Bisecting angle technique
- Bite-wing technique
- Occlusal technique

## Standard 9

Outline the advantages and disadvantages of digital radiography.

- Advantages
  - Gray scale resolution is excellent and the dentist may enhance contrast on the computer
  - 50%-80% less radiation is used in exposure
  - Immediate images
  - Lower cost for equipment and film
  - No environmental concerns related to disposal of chemicals
  - Great for patient education because patients can see the conditions within the teeth
- Disadvantages
  - Initial setup costs are higher because digital systems require computers and accessory items for each operator
  - Intraoral sensors are larger and bulkier than traditional x-ray film
  - Sensors cannot be heat sterilized, so they must be protected with disposable barriers
  - Some professionals feel the quality of images is not as good as traditional films

## Standard 10

### Performance Skills

Demonstrate extraoral x-ray techniques.

- Panoramic x-ray technique

## Standard 11

Evaluate x-rays for diagnostic quality.

- Contrast
- Density
- Image detail

- Image distortion

### Standard 12

Identify common exposure and technique error.

- Blurred images-movement during the exposure
- Clear film-film was not exposed
- Cone cutting-x-ray beam did not cover the entire film
- Double exposure-film was exposed twice
- Elongation-vertical angulation too flat
- Foreshortening-vertical angulation too steep
- Herringbone effect-film was placed with the white side away from the PID
- Missing apical structures-film did not cover entire tooth
- Occlusal plane tilted-film not in proper position
- Overexposure-excessive exposure
- Overlapping-central ray not directed through interproximal space
- Underexposure-insufficient exposure

### Standard 13

Identify common processing errors.

- Dark films-overdevelopment, strong solution, solution too warm, light leaks
- Fogged film-improper safelight, expired film, stray radiation
- Light films-underdevelopment, weak solution, contaminated solution
- Overlap-films touching or overlapping during processing
- Roller marks-dirty rollers on automatic processor

### Standard 14

Outline care of the automatic processor.

- Must be cleaned according to manufacturer's directions
- Chemicals should be replenished according to manufacturer's directions and disposed of according to state standards

### Standard 15

Identify radiographic landmarks for mounting intraoral films.

- Enamel
- Dentin
- Pulp
- Maxillary sinus
- Maxillary tuberosity
- Retromolar area
- Ramus



### Standard 16

#### Performance Skills

Mount and label radiographs.

- Patient's name
- Date of exposure
- Dentist's name and address

## STRAND 3

**Students will examine pharmacology and pain control in the dental office setting.**

### Standard 1

List each part of a prescription.

- Superscription
- Inscription
- Subscription
- Signature

### Standard 2

Identify common prescription abbreviations.

### Standard 3

#### Performance Skills

Record prescription in the patient record.

### Standard 4

List commonly prescribed drugs in dentistry.

- Analgesics
  - Acetaminophen
  - Ibuprofen
  - Naproxen
  - Aspirin
  - Codeine
- Antibiotics
  - Amoxicillin
  - Cephalexin
  - Erythromycin
  - Clarithromycin
  - Azithromycin
  - Chlorhexidine
- Antifungal agents
  - Nystatin
- Antiviral agents

- Acyclovir
- Antianxiety agents
  - Diazepam
  - Valium

### Standard 5

#### Performance Skills

Prepare for a local anesthetic injection.

- Proper handling of the anesthetic syringe
- Proper handling of the anesthetic cartridge
- Proper handling of the disposable needle
- Application of a topical anesthetic

### Standard 6

Identify local anesthetic agents.

### Standard 7

Identify the complications and precautions for dental anesthesia.

- Injection into a blood vessel-aspiration
- Toxic reaction-check patient's dental/medical history for previous reactions
- Temporary numbness-caution patient not to bite tongue, lips, and cheeks
- Paresthesia (temporary or permanent)-use only sterile solution and proper injection technique

### Standard 8

Explain the use and purpose of nitrous oxide in dental treatment.

- Inhalation sedation

### Standard 9

Describe the procedure for monitoring nitrous oxide/oxygen analgesia.

### Standard 10

#### Performance Skills

Document the use of anesthesia and pain control in the patient record.

## STRAND 4

**Students will identify components of operative procedures and assist in patient treatment.**

### Standard 1

Identify reasons for restorative and esthetic dental treatment.

- Restorative
  - Treat caries, fractures, abrasions, erosion, defects in tooth structure
  - Replace failed restorations

- Restore a tooth to normal function and appearance
- Esthetic
  - Improve appearance of teeth due to discoloration, developmental abnormalities, abnormal spacing, or trauma

### Standard 2

Outline responsibilities of the dental assistant in operative dental procedures.

- Prepare treatment room.
- Know proper sequence of procedures in order to anticipate the dentist's needs during patient treatment.
- Mix materials.
- Prepare retainers.
- Assist in the following:
  - Administration of local anesthesia
  - Moisture control
  - Maintaining patient comfort
- Apply appropriate exposure control protocols.
- Perform only those expanded functions allowed by the State Dental Practice Act.

### Standard 3

Identify handpieces and burs, their common uses in operative dentistry, and maintenance.

- Low-speed
- High-speed
- Fiber optic light
- Air abrasion
- Laser handpiece
- Burs: round, inverted cone, straight fissure plain and cross cut, pear, end cutting
- Diamonds
- Trimming and finishing burs
- Polishing disks and wheels
- Stones
- Rubber points

### Standard 4

#### Performance Skills

Mix restorative dental materials.

- Insert indicator text Amalgam
- Composite resins
- Bonding systems
- Cements
- Zinc oxide eugenol
- Glass ionomer

- Liners: calcium hydroxide, dental sealer, varnish
- Tooth whitening systems

## Standard 5

Outline treatment options for vital bleaching.

- In-office treatment
- At-home treatment
- Over-the-counter treatment

## Standard 6

Outline steps for instrument setup and care.

## Standard 7

Set up for a Class II amalgam procedure.

- Instruments
  - Basic setup
  - Hand cutting instruments (spoon excavator)
  - Amalgam carrier
  - Condensers
  - Burnishers
  - Carvers
  - Articulating paper holder
- Accessories
  - Local anesthetic setup
  - HVE
  - Saliva ejector
  - High and low speed handpieces with assortment of burs
  - Matrix setup including wedge
  - Assortment of dental liners
  - Bases
  - Sealers
  - Amalgam capsules
  - Dental floss
  - Articulating paper holder
  - Cotton pellets
  - Cotton rolls
  - 2x2 gauze

## Standard 8

### Performance Objective

Set up for a composite procedure.

- Instruments
  - Basic setup

- Hand cutting instruments (spoon excavator)
- Composite placement instruments
- Articulating paper holder
- Accessories
  - Local anesthetic setup
  - HVE tip
  - Saliva ejector
  - High and low speed handpieces with assortment of burs
  - Mylar matrix setup
  - Assortment of dental liners
  - Bases
  - Sealers and bonding agents
  - Composite materials
  - Curing light
  - Finishing burs
  - Dental floss
  - Articulating paper holder
  - Cotton rolls
  - 2x2 gauze
  - Abrasive strips
  - Polishing kit and paste

### Standard 9

Provide post-operative instructions for restorative procedures.

### Standard 10

#### Performance Skills

Record the amalgam procedure in patient record.

### Standard 11

#### Performance Skills

Record the composite procedure in patient record.

## DENTAL SCIENCE III-CORE STRANDS, STANDARDS, and INDICATORS

### STRAND 1

**Students will perform skills and assist with prosthodontic procedures including dentures, crown, and bridge.**

#### Standard 1

Identify types of prosthetic appliances including fixed or removable.

### Standard 2

Explain the various prosthodontic procedures.

- Dentures
- Crowns
- Bridges
- Partial
- Veneers

### Standard 3

Identify instruments used in crown and bridge procedures.

### Standard 4

#### Performance Skills

Set up for a crown and bridge procedure.

### Standard 5

Complete laboratory authorization forms.

### Standard 6

#### Performance Skills

Mix cements both temporary and permanent.

### Standard 7

#### Performance Skills

Demonstrate patient education on the care and maintenance of prosthetic appliances.

### Standard 8

#### Performance Skills

Prepare a set up tray for removable prosthodontics (partials and dentures).

### Standard 9

#### Performance Skills

Record removable prosthodontics procedure in patient chart.

## STRAND 2

**Students will demonstrate basic knowledge of and assist with common surgical procedures.**

### Standard 1

Identify the instruments in a basic surgical set up and describe their function.

**Standard 2**

**Performance Skills**

Set up for a basic extraction.

**Standard 3**

**Performance Skills**

Place and remove post-extraction dressings (2x2 gauze).

**Standard 4**

Describe how to respond to post-surgical bleeding.

**Standard 5**

Demonstrate the ability to explain post-op instructions to a patient.

**Standard 6**

Explain a “dry socket” and know its causes.

**Standard 7**

Identify the instruments used in suture removal and describe the functions of each.

**Standard 8**

**Performance Skills**

Set up for a suture removal.

**Standard 9**

Remove sutures.

**Standard 10**

**Performance Skills**

Record basic extraction procedure in patient record.

**STRAND 3**

**Students will demonstrate basic knowledge of and assist with procedures related to endodontics.**

**Standard 1**

Identify the instruments and accessories used in endodontic treatment and describe their functions.

**Standard 2**

**Performance Skills**

Set up for basic endodontic procedures.

**Standard 3**

List the general steps in endodontic diagnosis.

**Standard 4**

List and describe the methods of pulp testing.

**Standard 5**

Explain root canal procedure to patient.

**Standard 6**

Place and remove dental dam.

**Standard 7**

Demonstrate the ability to provide post-op instructions to patient.

**Standard 8**

**Performance Skills**

Record basic endodontic treatment in patient record.

**STRAND 4**

**Student will demonstrate basic knowledge of and perform skills related to orthodontics.**

**Standard 1**

Demonstrate knowledge of the Palmer numbering system.

**Standard 2**

Identify the three types of occlusion:

- Neutron
- Overbite
- Underbite

**Standard 3**

List the benefits of orthodontic treatment.

**Standard 4**

List the steps in obtaining records for orthodontic treatment and planning.

**Standard 5**

Provide patient information on caring for orthodontic appliances.

**Standard 6**

Provide proper oral hygiene and dietary instructions as it relates to orthodontic appliances.



## STRAND 5

**Students will show basic knowledge, demonstrate skills, and assist with procedures on pediatric patients.**

### Standard 1

List and explain common procedures in pediatric dentistry.

### Standard 2

Apply and demonstrate effective communication with children.

### Standard 3

Identify and demonstrate patient management techniques for children.

### Standard 4

List the areas of preventative dentistry for children.

### Standard 5

#### Performance Skills

Apply pit and fissure sealants.

### Standard 6

Compare pediatric procedures with those of adults including cleaning, exam, restorative pulpotomy, and stainless-steel crown.

### Standard 7

Demonstrate the use of a patient education plan for instructing children and parents about oral hygiene.

### Standard 8

Describe types of injuries commonly seen in pediatric dentistry.

### Standard 9

Demonstrate knowledge of the first aid/emergency treatment for common injuries in pediatric dentistry.

### Standard 10

List types of child abuse.

### Standard 11

Describe injuries consistent with child abuse.

### Standard 12

Discuss the role of the Dental Assistant in reporting child abuse.

### Standard 13

#### Performance Skills

Record pit and fissure sealant procedure in patient record.

## STRAND 6

**Students will demonstrate knowledge of and perform skills related to periodontics.**

### Standard 1

#### Performance Skills

Set up for a dental prophylaxis:

- Ultrasonic scaler
- Precaution

### Standard 2

List the causes of periodontal disease.

### Standard 3

Describe the signs and symptoms of periodontal disease.

### Standard 4

List the surgical and non-surgical treatments for periodontal disease.

### Standard 5

Outline the use of mixing materials used in periodontal dressing.

### Standard 6

Demonstrate the ability to give post-op instruction for periodontal procedures.

### Standard 7

#### Performance Skills

Record prophylaxis/periodontal treatment in patient record.

## STRAND 7

**Students will utilize materials and demonstrate skills related to in-office laboratory procedures.**

### Standard 1

Identify and describe the major pieces of equipment found in the laboratory and the functions of each.

### Standard 2

List the three types of impressions taken in a dental office.

**Standard 3**

Demonstrate the ability to explain the impression procedure to a patient.

**Standard 4**

**Performance Skills**

Take preliminary impressions.

**Standard 5**

**Performance Skills**

Pour, trim, and evaluate the quality of models.

**Standard 6**

**Performance Skills**

Fabricate a thermal plastic tray.

**DENTAL SCIENCE IV-CORE STRANDS, STANDARDS, and INDICATORS**

**STRAND 1**

**Students must complete a minimum of 90 hours of clinical experience in a dental office.**

**Standard 1**

Complete the Dental Assisting Clinical Application:

- Provide documentation of completion of skills competencies and fees and books paid
- Provide Hepatitis B vaccination or declination form

**Standard 2**

Complete a clinical work schedule calendar.

**Standard 3**

Provide weekly documentation of hours in attendance at clinical site and skills performed.

**Standard 4**

Upon completion of clinical hours, have clinical site complete evaluation, and return to the instructor.

**Standard 5**

**Performance Skills**

Discuss student externship evaluation with instructor.

**STRAND 2**

**Students will demonstrate their job seeking skills.**

**Standard 1**

Determine personal career goals and employment opportunities.

**Standard 2**

**Performance Skills**

Prepare a target resume.

**Standard 3**

Using professional letter format, prepare a cover letter.

**Standard 4**

**Performance Skills**

Complete a job application.

**Standard 5**

**Performance Skills**

Using professional letter format, prepare a follow-up letter.

**Standard 6**

**Performance Skills**

Outline methods of negotiating salaries and benefits.

**Standard 7**

Outline techniques for successful job interviews.

**Standard 8**

**Performance Skills**

Participate in a mock job interview.

**Standard 9**

Outline techniques for proper termination procedures.

**Performance Skills**

Complete a minimum of 90 hours of clinical externship experience in a dental office.

**Skill Certificate Test Points by Strand**

Test Name	Test #	Number of Test Points by Standard															Total Points	Total Questions
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
Dental Assisting-BM 1 (Dental Science I)	720	10	9	6	3	9	25	9	1	12	4						88	53
Dental Assisting-BM 2 (Dental Science II)	721	11	14	9	28												62	31
Dental Assisting-BM 3 (Dental Science III)	722	8	9	11	7	5	8	9									57	28
Dental Assisting-BM 4 (Externship)	723	INDUSTRY REPORT FOR EXTERNSHIP															100	N/A