Program Orientation: Dental Assistant

Entry Level

- Initiate the Dental Assistant Entry Level Program.

Introduction to Dental Assisting

- Review dental disease and dentistry from the “beginning of time”
- Identify the items on the timeline of dental history
- Name the individuals who had a great impact on the profession of dentistry
- Identify the people who promoted education and organized dentistry
- Explain what DDS and DMD stand for
- Identify the nine specialties of dentistry
- Describe, generally, the career skills performed by dental assistants, dental hygienists, and dental laboratory technicians
- Identify the responsibilities of the dental team in regard to dental records, implied and informed consent, subpoenas, and the statute of limitations
- Define ethics and give examples of the American Dental Association and American Dental Assistants Association’s principles of ethics
- Identify how patient health information can be used and disclosed, as well as the rights of patients. Gaining an understanding of the training that the staff must follow to be compliant with the HIPAA laws

Basic Dental Sciences

- Explain the functions and structure of the skeletal system, muscular system, nervous system, circulatory system and the lymphatic system and the immune system
- List and identify the landmarks of the face and the oral cavity, including the tongue, floor of the mouth, and salivary glands
- List and identify the bones of the cranium and the face as well as the landmarks on the maxilla and the mandible
- Identify the parts of the temporomandibular joint (TMJ) and describe how the joint works
- Describe the life cycle of a tooth and identify the stages
- Identify the four primary structures of the tooth and the location and function of each
- Identify the substances of enamel, dentin, cementum, and pulp and their identifying marks

Dental Infection Control

- Identify the rationale, regulations, recommendations, and training that govern infection control in the dental office
- Describe how pathogens travel from person to person in the dental office
- List the three primary routes of microbial transmission, and the associated dental procedures that affect the dental assistant
- Demonstrate the principles of infection control, including medical history, handwashing, personal protective equipment, barriers, chemical disinfectants, ultrasonic cleaners, sterilizers, and instrument storage
- List various disinfectants and their applications as used in dentistry
- Identify and demonstrate the usage of different types of sterilizers
- Demonstrate the usage of several types of sterilization monitors, such as biological and process indicators
- Identify and show the proper usage of preprocedural mouth rinses, high-volume evacuation, dental dams, and disposable items
- Demonstrate correct procedures for dental unit water line maintenance
- Identify and demonstrate the correct protocol for disinfecting, cleaning, and sterilizing prior to seating the patient, at the end of a dental treatment, in the dental radiography area, and in the dental laboratory
LEARNING OBJECTIVES

• Identify the components of the periodontium and the considerations of the alveolar bone
• Describe the structures of the gingiva and the mucosa
• Explain the groups of microorganisms and staining procedures used to identify them
• Identify the characteristics pertaining to bacteria, protozoa, yeasts and molds, viruses
• Describe the diseases of major concern to the dental assistant and explain why they cause concern
• Identify how the body fights disease
• Explain the types of immunity and routes of microorganism infection

Oral Health and Nutrition
• Describe how plaque forms and affects the tooth
• Identify oral hygiene tips that will aid each age group
• Identify the oral hygiene aids, including manual and automatic, available to all patients
• Demonstrate the six tooth brushing techniques
• Identify types of dental floss and demonstrate flossing technique
• Describe fluoride and its use in dentistry
• Define fluoridation and describe its effects on tooth development and the posteruption stage
• List and explain the forms of fluoride. Describe how to prepare a patient and demonstrate a fluoride application
• Describe how an understanding of nutrition is used in the profession of dental assisting
• Define nutrients found in foods, including carbohydrates, fiber, fats, proteins, and amino acids. Explain how they affect oral hygiene
• Identify the food sources, functions, and implications of deficiencies of fat-soluble vitamins, water-soluble vitamins, and the seven major minerals
• Identify and explain how vitamins, major minerals, and water function in the body
• Discuss the implications of eating disorders
• Explain how energy drinks and shots affect the body
• Discuss diet and culture and how it relates to oral health.

Tooth Morphology and Dental Charting
• Identify the dental arches and quadrants using the correct terminology
• List the primary and permanent teeth by name and location
• Explain the eruption schedule for the primary and permanent teeth
• Identify the different divisions of the tooth, including clinical and anatomical divisions
• Identify the surfaces of each tooth and their locations
• List the anatomical structures and their definitions
• Describe each permanent tooth according to location, anatomical features, morphology, function, position, and other identifying factors
• Describe each deciduous (primary) tooth according to its location, anatomical features, morphology, function, position, and other identifying factors
• Explain why charting is used in dental practices
• Identify charts that use symbols to represent conditions in the oral cavity
• List and explain the systems used for charting the permanent and deciduous dentitions
• Define G. V. Black’s six classifications of cavity preparations
• List common abbreviations used to identify simple, compound, and complex cavities
• Describe basic dental charting terminology
• Explain color indicators and identify charting symbol

Dental Pharmacology and Med Emergencies
• Identify terms related to drugs, pharmacology, and medicines, the difference between drug brand names and generic names, the parts of a written prescription and the texts pertinent to pharmacology
• Give the English meanings of the Latin abbreviations used for prescriptions
• Specify the drug laws and who enforces them
• Identify the schedules for the Comprehensive Drug Abuse Prevention and Control Act of 1970
• Identify the routes through which drugs can be administered
• Demonstrate an understanding of the drugs used in dentistry, and the ways in which they are used
Dental Assistant
LEARNING OBJECTIVES

- Summarize the uses and effects of nicotine, caffeine, alcohol, marijuana, and cocaine
- Summarize information about heroin, morphine, and codeine
- Supply information about amphetamines
- Demonstrate an understanding of hallucinogenic drugs such as LSD, PCP, and mescaline
- Demonstrate an understanding of barbiturates
- Describe several emergency situations that may take place in the dental office Explain how dental assistants can be prepared for these possibilities
- Describe the CAB approach to CPR and demonstrate the associated skills
- Define the terms and anatomy used in CPR delivery. Determine if the patient is unconscious and demonstrate knowledge of how to open the airway, as well as when and how to deliver chest compressions
- List and describe several causes of airway obstructions in the dental office Demonstrate the ability to open the airway and to perform the Heimlich maneuver
- List and describe the signs and treatments for syncope, asthma, allergic reactions, anaphylactic reaction, hyperventilation, epilepsy, diabetes mellitus, hypoglycemia, angina pectoris, myocardial infarction, congestive heart failure, and stroke/cerebrovascular accident
- List and describe several dental emergencies that a patient may have, such as an abscessed tooth, alveolitis, avulsed tooth, broken prosthesis, soft tissue injury, broken tooth, and loose crown
- Explain how a pulse oximeter, capnography, and electrocardiography work, and how they can be used in the dental office

Dental Radiology
- Identify uses of dental radiography
- Describe the history of dental x-ray film
- List the properties of radiation
- Describe the radiation types
- Identify the radiation units of measurements
- Explain the biological effects of radiation exposure
- Identify the components of a dental x-ray unit and explain the function of each component
- Describe safety precautions when using radiation
- Explain how an x-ray is produced
- Describe the composition, sizes, types, and storage of dental x-ray film
- Add Dentrix activity – mounting
- Add Lab activity on film placement – Rinn holder not Snap a ray

Preparation for Dental Patient Care
- Define psychology and paradigm
- Describe the components of the communication process
- List the skills used in listening
- Differentiate the terms used in verbal and nonverbal communication
- Demonstrate how the following body language is used in nonverbal communication behavior: spatial, posture, facial expression, gestures, and perception
- Discuss how defense mechanisms can inhibit communication
- Identify and explain dental patient phobias and concerns
- Identify office stress, and demonstrate how to achieve conflict resolution
- Explain how the patient record is developed and the importance of the personal registration form, medical and dental information, clinical evaluation, and the extraoral and intraoral examinations
- Describe how the patient record may be called into litigation or used in a forensic case
- Perform or assist the dentist in an extraoral and an intraoral evaluation including lips, tongue, glands, and oral cavity
- Explain how a diagnosis and treatment plan is developed
- Perform vital signs on the patient, including both oral and tympanic temperature, pulse, respiration, and blood pressure
- Document the vital signs and be alert to any signs that are abnormal
- Identify the five Korotkoff sounds, the two that are used in recording blood pressure, and the man who described them in 1905

Fundamentals of HIPAA
- Describe the basic requirements of HIPAA
- Understand the HIPAA Privacy Rule
- Understand the HIPAA Security Rule
Dental Assistant
LEARNING OBJECTIVES

- Describe the HITECH Act
- Explain Regulations for Business Associates
- Summarize HIPAA Documentation and Training
- Review Applied HIPAA Security for Healthcare Professionals

Dental Office Management and Employment
- Identify the dental office staff and their areas of responsibility
- Identify marketing ideas for dentistry
- Outline the proper procedure for answering an incoming call
- Describe the information every message should contain
- Describe telephone and business office technology and its uses
- Give examples of the ways in which computers are used in the dental office
- Explain how database management concepts can be used in the dental office
- Explain why ergonomics is important at a computer workstation
- Explain ways in which effective patient scheduling can be accomplished in the dental office
- Identify the equipment needed for record management
- Define key terms related to accounts receivable
- Identify computerized and manual systems for the management of patient accounts
- Identify the accounts payable expenses that the dental practice is responsible for
- Identify three pathways to obtain DANB certification
- Explain how to obtain employment and identify types of practices
- Set goals and identify sources to obtain employment in the dental field
- Identify the steps in preparing a cover letter and a résumé
- Explain how to prepare for the interview
- Describe the interview process, and identify the skills and preparation techniques that will aid in obtaining a job
- Identify the skills that a successful dental assistant possesses
- Explain how to terminate employment

Externship Readiness Skills
- Explore CareerStep Community career resources
- Develop effective time management skills
- Enhance your creative and critical thinking
- Integrate critical and creative thinking skills into your life
- Learn physical and emotional coping techniques to deal with stress
- Explore essential ingredients of the communication process
- Acquire methods to maximize verbal, nonverbal, and written communication
- Relate the importance of professional image to career success
- Learn strategies to write a powerful resume

Dental Office and Basic Chairside Assisting
- Describe the design of a dental office, the equipment and function, explaining the purpose of each area
- Describe the daily routine to open and close the dental office
- Explain the basic concepts of chairside assisting
- Identify the activity zones and classifications of motion
- Describe the necessary steps to prepare the treatment room
- Explain the necessary steps to seat the patient for treatment
- Describe the ergonomics of the operator and the assistant at chairside
- Describe the necessary steps to dismiss the patient after treatment is finished
- Identify the special needs of certain patients
- Identify the parts of an instrument
- Describe how instruments are identified
- Identify the categories and functions of dental burs
- Describe the types and functions of abrasives
- Explain the various handpieces and attachments
- Describe the types of tray systems and color-coding systems
- Describe the transfer zone
- Define a fulcrum and tactile sensation
- Describe the grasps, positions, and transfer of instruments for a procedure
Dental Assistant

Learning Objectives

- List the eight rules for instrument transfer
- Understand instrument transfer modification
- Describe and demonstrate how to maintain the oral cavity
- Explain the equipment used in the treatment of the oral cavity
- Describe techniques for moisture control and isolation

Dental Restorative and Laboratory Materials

- Differentiate between dental cements, bases, liners, and bonding agents
- Explain the role of the dental assistant in preparing materials and the properties of dental materials
- Identify the types of dental cements. Explain the properties, composition, uses, and manipulation of zinc phosphate cement, zinc-oxide-eugenol (ZOE) cement, polycarboxylate cement, glass ionomer cement, resin-modified glass ionomer cement, calcium hydroxide, varnish, resin cement, and compomer cement
- Discuss restorative dentistry and the various materials and techniques involved, including cavity detection and cavity cleaners, disinfectants, and desensitizers
- Identify cavity preparation terminology
- Explain the properties, composition, and manipulation of dental amalgam
- Explain the composition of composite resins and properties and manipulation of various composite restorations
- Identify materials used in the dental laboratory and perform associated procedures
- Demonstrate the knowledge and skills needed to prepare, take, and remove alginate impressions and wax bites
- Demonstrate the knowledge and skills necessary to prepare elastomeric impression materials such as polysulfide, silicone (polysiloxane and polyvinyl siloxanes), and polyether for the dentist
- Explain the process for debriding and disinfecting impressions, bite registrations, wax bites, and facebow registrations
- Demonstrate the knowledge and skills necessary to use gypsum products such as Type I, impression plaster; Type II, laboratory or model plaster; Type III, laboratory stone; Type IV, die stone; and Type V, high-strength die stone
- Identify use of a dental articulator and facebow for dental casts or study models
- Demonstrate taking a facebow transfer and mounting models on an articulator
- Demonstrate the knowledge and skills necessary to fabricate acrylic tray resin self-curing and light-curing custom trays, vacuum-formed trays, and thermoplastic custom trays
- Demonstrate the knowledge and skills necessary to contour prefabricated temporary crowns and to fabricate and fit custom temporary restorations

Clinical Dental Procedures

- Describe the methods used to manage the pain and anxiety associated with dental procedures
- Explain various topical anesthetics and their placements
- Identify the injection sites for the maxillary and mandibular arches
- Describe the equipment and materials needed to administer local anesthetic
- Demonstrate the ability to assist in the administration of nitrous oxide
- Explain the purpose of using dental sealants and where they are placed
- Explain how the dentist decides where and when to place the dental sealant
- Discuss the role of the dental assistant in the placement of dental sealants
- Describe the process of dental decay and how the sealants work
- Describe and explain the rationale for each step in the coronal polish procedure
- List and explain the types of equipment and materials used to perform a coronal polish
- Describe the role of the dental assistant in all phases of fixed prosthodontic treatment
- Describe various types of fixed prostheses and dental materials used and their functions
- Explain the involvement of the laboratory technician in the fabrication of fixed prostheses
- Explain the role of the dental assistant during cavity preparation, and while using the CAD/CAM systems to design and manufacture an indirect restoration
- Discuss how the CAD/CAM systems are used in the dental office and in the dental laboratory
- Describe considerations about the patient related to removable prosthetic treatment
Dental Assistant
LEARNING OBJECTIVES

- Describe the advantages and disadvantages of the partial denture, its components, and the appointment schedule
- Identify and explain the computer-aided design (CAD) and the computer-aided manufacturing (CAM) restorative systems

Dental Specialities
- Define endodontics and describe what an endodontist does
- Identify diagnostic procedures
- Identify instruments used in endodontic procedures and describe their functions
- Identify materials used in endodontics and describe their functions
- Describe endodontic procedures and the responsibilities of the dental assistant
- Describe the scope of oral and maxillofacial surgery
- Identify the surgical instruments used in various types of surgery and describe their functions
- Describe how to prepare the patient for surgical treatment
- Explain surgical procedures, including tray setups and assisting responsibilities
- List and describe cancer and oral abnormalities detection and list and describe biopsy techniques
- List the postoperative instructions given to patients and explain postsurgical complications
- Describe temporomandibular joint (TMJ) disease
- Explain the oral surgeon’s relationship with the hospital
- Explain the considerations for dental implants, including patient preparedness and list the indications and contraindications for dental implants
- List and describe the types of dental implants and explain the surgical procedures for placing the implants and describe the dental implant surgery and identify the instruments and equipment
- Discuss post operative home care and maintenance for the patient with dental implants
- Define oral pathology and identify the dental assistant’s role in this specialty
- Identify oral diseases and lesions related to biological agents, physical agents and chemical agents
- Identify oral conditions related to developmental disturbances
- Distinguish among oral conditions related to nutritional disturbances
- Discuss oral cancer and its warning signs
- Identify the conditions and lesions of oral neoplasms and oral lesions related to HIV and AIDS
- Define orthodontics and describe the orthodontic setting and defining the role of the dental assistant in an orthodontic setting
- Describe preventive, interceptive, and corrective orthodontics
- Identify and describe the function of basic orthodontic instruments
- Explain the procedure for removing orthodontic appliances and how the teeth are kept in position after appliance removal
- Define pediatric dentistry as a specialty
- Identify common procedures in pediatric dentistry, including preventive procedures, diet, restorative procedures, preventive and interceptive orthodontic treatment, and restorative procedures
- Identify the equipment unique to pediatric dentistry
- Explain common emergencies in pediatric dentistry and the treatment for these emergencies
- Identify the signs of child abuse and the procedure for reporting suspected child abuse
- Describe the scope of periodontics and identify members of the periodontal team and their roles
- Describe the stages of periodontal disease and explain the diagnostic procedures involved in the patient’s first visit to the periodontal office
- Identify and describe periodontal instruments and their uses
- Describe the use and the benefits of lasers in dentistry and explain the safety precautions when using dental lasers
- Describe nonsurgical procedures and the dental assistant’s role in each procedure and explain surgical procedures and dental assisting responsibilities
- Describe plastic (esthetic) periodontal surgery and list the types of surgeries
- Describe periodontal maintenance procedures and the patient’s role relating to each
- Define cosmetic dentistry and describe what is involved in cosmetic dentistry including who performs cosmetic dentistry and education requirements
LEARNING OBJECTIVES

• Explain the scope of cosmetic dentistry and discuss the basic elements of psychology and sociology that are considered for cosmetic treatment
• Identify and describe specific procedures performed in cosmetic dentistry, including diagnosis and treatment planning, legal forms, and documentation

Career Success in Healthcare
• Assess and develop time-management skills
• Develop plans to enhance creative and critical thinking
• Learn the basics of professional communication

Dental Assistant Entry Level Final Exam
• Review Dental Assistant Program Final Exam Instructions
• Complete the Dental Assistant Program Final Exam

Initiating Your Externship
• Create your profile in the Learner Placement Portal
• Review the externship preparation resources
• Explore CareerStep Community career resources
• Understand the benefits of an externship
• Access externship participation eligibility requirements
• Recognize the externship site placement process and considerations

Clinical Externship
• Work with local dentists for real-world, hands-on experience

Program Completion: Dental Assistant Entry Level
• Prepare to take the next steps after program completion

Total Hours: 460
300 Coursework, Simulations, and Experiential + 160 Clinical Externship