PROGRAM INFORMATION

The objective of the Dental Assisting program is to prepare students to enter the workforce as trained dental assistants. Focus will be placed on both basic and advanced techniques in the field of dentistry. The table below provides a snapshot of the program:

Hybrid Structure: The program has been structured to meet the demands of today's students by teaching and training in a flexible and convenient hybrid program consisting of both online and in person training. Students will walk away with the confidence and necessary skill set to be a valued member of a dentistry team. Our program provides students with hands-on training via exposure and real-world dental scenarios they will need before entering the workforce.

Online Modules: This program offers 12 online modules consisting of pre-recorded instructional training videos, guide themselves through lectures slides, and complete quizzes and tests.

In-Person Training: This program gives students hands-on learning instruction via eight (8) in-person laboratory days and real-world experience via a 40-clock hour externship requirement. Students will find familiarity with each of these classes as they work through the entire curriculum for a second time via hands-on clinical training. Textbook: Modern Dental Assisting / Edition 13, by Doni L. Bird CDA, RDA, RDH, MA, Debbie S. Robinson CDA, MS, Elsevier ISBN-13: 9780323624855 Published April 2020

Program Outline:

WEEK	ONLINE MODULES	IN-PERSON LAB	OLE HRS	LAB HRS	CPR HRS	EXT HRS	TOT HRS
1	Module 1: Introduction to Dental Assisting Module 2: Oral Anatomy & Infection Controls Module 5: Instruments & Oral Surgery Online Modules: 1, 2 & 5 are due PRIOR to Lab - DA 101	DA 101: Basic Chairside Assisting & Infection Control	3	8			11
2	Module 6: Impression & Lab Materials Module 9: Restorative & Esthetic Material Online Modules: 6 & 9 are due PRIOR to Lab - DA 102	DA 102: Alginate Impressions & Model Pouring/Trimming	3	8			11

WEEK	ONLINE MODULES	IN-PERSON LAB	OLE HRS	LAB HRS	CPR HRS	EXT HRS	TOT HRS
3	Module 4: Oral Diagnosis & Dentix Ascend Module 7: Provisional Coverage Online Modules: 4 & 7 are due PRIOR to Lab - DA 103	DA 103: Provisional Coverage, Charting & Dentix Ascend	3	8			11
4	Module 3A: Pediatric Dentistry & Dental Caries Module 12: Dental Photography Online Modules: 3A &12 are due PRIOR to Lab - DA 104	DA 104: Matrix Systems, Moisture Control & Instruments Review & CPR	3	8	5		16
5	Module 8: Basic Radiology Online Module: 8 is due PRIOR to Lab - DA 105	DA 105: Dental Radiology	3	8			11
6	Module 10 Fixed Prosthodontics Module 11: Removable Prosthodontics & Dental Implants Online Modules: 10 & 11 are due PRIOR to Lab - DA 106	DA 106: Room Setup, Mock Chairside Assisting	3	8			11
7	Module 3B: Coronal Polishing & Sealants Online Module: 3B is due PRIOR to Lab - DA 107	DA 107: Coronal Polishing & Sealants	3	8			11
8	Online Final Online Final: Due PRIOR to DA 108	DA 108: Cerec Procedures & Practical Final Exam	3	8			8
9-10	Externship					40	40
Online Lectures + Lab + CPR + Externship Grand Total			21	64	5	40	130

Note: All in person labs are held in person at the school.

COURSE DESCRIPTIONS

Module 1: Introduction to Dental Assisting

This study unit introduces students to dentistry, dental assisting, and being a part of the dental team. Members of the dental team and their duties are covered. The different types of dental offices and their separate areas are described. The professional qualifications and responsibilities of a dental assistant are addressed, along with a look at how licensure is managed. This unit presents some dental assistant basics. First, it explains the importance of knowing the laws and rules of dentistry and how they affect a dental practice. Students also learn about how to become a true dental professional by understanding what it means to act in an ethical manner. The Health Insurance Portability and Accountability Act (HIPAA) is presented from a healthcare professional's viewpoint, and the practical application of this law. Students learn how to greet and seat the patient, and the different oral evacuation systems and tools in the operatory for moisture control.

Module 2: Oral Anatomy & Infection Controls

Students are introduced to dental terminology and anatomy. This unit presents information about the oral cavity, parts of the teeth, and the types of teeth and a brief introduction to the way teeth are numbered and classified. This study unit also introduces students to the most current concepts and procedures for infection control and sterilization including how to properly prepare the dental treatment room and all dental armamentarium (tools, instruments, equipment, etc.) used for patient treatment as well as the most current guidelines regarding infection control and sterilization procedures. Students learn about infection control procedures, personal attire, protective barriers, sterilization, and disinfection procedures, and why they are so important in the dental office. Students study the microorganisms that cause AIDS, hepatitis B, and herpes and how they are transmitted. This unit covers oral pathology, including temporomandibular joint problems, oral cancer, and the formation of dental caries.

Module 5: Instruments & Oral Surgery

This study unit introduces students to the different instruments and pieces of equipment, handpieces, and accessories typically found in a dental operatory (treatment room). The specialties of endodontics and oral and maxillofacial surgery will be covered including specialty descriptions, explanations for the different procedures and the types of instruments used. Students learn the various artificial appliances that can be used when needed. The endodontics section of this study unit describes various endodontic conditions, diagnostic methods, instrumentation, and procedures (including root canal therapy).

DA 101 Lab: Basic Chairside Assisting & Infection Control

Students are given explanation of homework assignments in the textbook, demo of the simulation software and other videos, office tour and orientation/operation of all equipment. Patient education videos are viewed to get "up to speed" as to the scope of modern dental treatments available. Students are oriented to the school and receive our video platform on-boarding. General Introduction to terminology and equipment, including vocabulary and definitions, equipment set up and list, maintenance and safety review are covered.

The divisions of specialties in dentistry, professionalism, dress and personal appearance, and HIPPA regulations as related to patient confidentiality are reviewed. Students learn the non-technical sides of Dental Assisting including professionalism, the dental team, law, and ethics.

Students are taught how to don the various Personal Protective Equipment (PPE) required in the dental clinic, proper handwashing technique, proper ultrasonic and autoclave use; disinfection control and procedures and placing barriers in the treatment room, plaster room, sterilizer room, and in the dental office. Mechanisms of disinfection, sterilization, OSHA, MSDS sheets and the goals of infection control

are discussed together with Occupational Safety and Health Administration (OSHA) requirements and standards.

Students demonstrate office opening and closing procedures, taking patient medical histories, vital signs, set-up and teardown of treatment rooms, equipment, and instruments, operation, and positioning options of various dental chairs. lights, hand piece set-up and hand piece bur-changing, three-way syringes, etc. Four handed dentistry, including but not limited to operatory set up, instrument transfer, isolation techniques (how to use cotton rolls, dry angles, and rubber dams), suctioning (use of high-volume suctions and low - volume suction including how to keep the patient comfortable during a dental procedure, how to hold the high-volume suction so that it efficiently removes liquid and saliva without suctioning the patients' cheeks, tongue or other oral structures) are covered. Basic procedure tray set ups are also demonstrated by the student.

Dental Dam application and uses, suctioning and retraction techniques, instrument transfer and demonstration, techniques to ensure visibility for the Doctor (patient positioning, mirror cleaning techniques, and maintaining lighting), tub and tray setups for various procedures, handpiece sterilization and maintenance are covered. Students learn the appropriate protective attire for both dental professionals and patients.

Local Anesthesia – the anatomical locations for each injection type (including mandibular blocks, infiltration, long buccal, gow gates, palatal), different anesthetics used and percentage of epinephrine and why each may be selected for a particular procedure; how to place anesthetic carpule into syringe and place needle onto syringe are taught and demonstrated. Students learn about anesthetic syringes and local anesthesia; transfer to the Doctor, needle-stick prevention, and proper sharps disposal.

Module 6: Impression & Lab Materials

This unit introduces students to the three types of impressions taken in a dental office, the types of impression trays and their characteristics of use, and discusses hydrocolloid impression materials and their uses, mixing techniques, and application. Students learn about elastomeric Impression Materials and Occlusal Students will have the opportunity to learn about the legal implications of creating and maintaining clinical records and technology’s role in the dental office. This unit discusses the safety precautions that should be taken in the dental laboratory as well as the types of equipment found in a dental laboratory and describes their uses. This unit also covers dental models, including the role of dental models, gypsum products and their role in the making of dental models, and the three methods of pouring dental models. Students learn the three types of custom impression trays and describe their use and will be able to identify the types of dental waxes and describe their use. Students learn the four vital signs routinely taken in the dental office and what to do in case of a medical emergency. Finally, the unit covers the composition and application of topical anesthetics, the composition and application of local anesthetic agents, injection techniques used for local anesthesia administration, the setup for local anesthesia and sedation, and general anesthesia. Students learn the importance of documenting anesthesia and pain control.

Module 9: Restorative & Esthetic Materials

This unit introduces students to restorative and esthetic dentistry, along with the dental assistant’s role in providing this type of care in general dentistry Students learn about cavity preparation, permanent restorations, complex restorations, veneers, and teeth-whitening. Students are introduced to topics related to restorative and esthetic dental materials, and learn the properties of dental materials, including mechanical properties, thermal change, electrical properties, corrosive properties, solubility, and application properties. This study unit covers direct restorations using amalgam and indirect restorations using gold-noble metal alloys and ceramic castings. Students learn how and why cavity liners are used in restoring tooth structure, how and why cavity sealers are used including varnish, how and why

desensitizers are used in restoring tooth structure, and how and why dental bases are used in the restoration of tooth structure. Students will understand the etching process of a tooth and its importance in the bonding of tooth and material, bonding systems and how they provide better adherence of dental materials to the tooth structure. Dental cement is also covered in this unit.

DA 102 Lab: Alginate Impressions & Model Pouring/Trimming

Students learn about the various types of fillings, such as, amalgam, composite, and glass ionomer filling materials; how to assist the dentist during a filling; preparation with the different types of equipment (including high speed handpiece, slow speed handpiece, air abrasion and water laser; review of instruments used in filling preparation and filling restoration). Students will learn how to mix glass ionomers or liner, how to triturate glass ionomer or amalgam, how to load and unload composite gun, how to use curing light, and how to assist while the dentist adjusts patient bite.

The model pouring and trimming portion of this section includes review of how to mix yellow stone; what ratio of stone to water; how to measure each, how to mix; how to use a dental vibrator for stone; how to get the proper pour with minimum bubbles; how long for stone to set; how to remove setup stone from alginate; how to turn on trimmer; how to use running water while trimming stone; how to trim stone properly and to what shape (orthodontic geometric or model trim for doctors use.)

Students are introduced to topics related to preliminary and final impression materials as well as laboratory procedures. This unit will also cover the different types of alginates, how to flavor, colorized version, ratio of powder to water, mixing, how to load tray, how to place tray in patients' mouth, how long to wait for alginate to set up, and how to remove set up alginate from patients' mouth. Students will produce alginate impressions of the upper and lower arches.

Module 4: Oral Diagnosis & Dentix Ascend

This study unit covers the examination and diagnostic techniques used for patient assessment including documentation, instrumentation, digital imaging, and digital photography. Students will also learn how to use the Dentix Ascend - Dental Software program including digital dental charting, scheduling appointments, entering procedures, treatment plans, and importing images.

Module 7: Provisional Coverage

This study unit introduces students to topics related to provisional coverage, including indications for a crown or fixed-bridge preparation and types of provisional coverage. Students will have the opportunity to learn about custom provisional coverage, preformed polymer and polycarbonate crowns, and aluminum crowns, procedures for expanded functions, such as fabricating and cementing a custom acrylic provisional crown or bridge, fabricating and cementing a preformed provisional crown, and fitting and cementing a preformed polycarbonate crown.

DA 103 Lab: Provisional Coverage, Charting & Dentix Ascend

Dentix Ascend - Patient Charting – Students learn how to chart existing conditions and treatment plans using procedure buttons and codes including how to write up a clinical chart, progress notes and the customization of a patient’s chart.

Treatment Planning - Phasing treatments and preparing a professional looking written presentation for patients is discussed. Students learn how to put in disclaimers to customize treatment plans along with the tracking lab cases.

Review of charting and treatment planning and all Occupational Safety and Health Administration (OSHA) regulations will be taught as it pertains to the role of a dental assistant.

Job Interviewing Skills – Students will learn how to prepare for job interviews. This unit will teach students how to dress properly for a job interview, time management, and how to prepare for any interview assessments. Students will undergo a mock interview to prepare them for the interview process.

Provisional Coverage - Crown and Bridge Procedures – Students are taught what a crown is, why it is needed, and the materials used to create crowns. Students will learn and demonstrate operatory set up for a crown procedure, (instruments used and materials needed including: impression materials, bite registration material, temporary restoration material), how to assist during the preparation of a crown, where to place suction, how to keep doctors mirror clean, how to mix build up materials and learn the components of a buildup, how to pack cord, how to mix impression material and tray placement for a doctor to take impressions. This unit will reinforce what impression material the doctor uses around the crown preparation, how to make temporary restoration using luxatemp and tempbond (other materials available for temporary use, e.g., aluminum crown forms) is covered. Students learn the different types of fixed prosthodontics restorations. Students learn the different types of fixed prosthodontics restorations, removable Prosthodontics (RPD) in the replacement of missing teeth, the components of both the partial and complete RPD's and the various steps necessary during replacement appointment.

Students learn the proper technique for expelling impression materials, how to fabricate and adjust temporary materials. Students are introduced to the steps involved in the fabrication and installation of complete (full) and partial dentures and asked to practice putting tray set-ups together for each stage of removable and Prosthodontic fabrication and delivery.

This unit also covers Shade Guides and their proper use. Students learn the procedure performed of the pulp of a primary or newly erupted permanent tooth that has been exposed. Students are taught to set up trays for the pulpotomy and stainless crown placement procedure with the use of a clinical video of crown preparation.

Module 3A: Pediatric Dentistry & Dental Caries

This study unit introduces students to the specialty of pediatric dentistry, the different procedures and the dental instruments used with young patients. Students will learn about preventive dentistry and the role of good nutrition in maintaining dental health and about dental plaque and the associated bacteria that cause caries and periodontal disease. This study unit also covers how to remove plaque and calculus from the teeth by using proper home-care techniques such as brushing, flossing, and the use of irrigation devices and fluoride. Students will properly learn the basics of nutrition, and key nutrients needed in the body to enhance healthy gum and oral hygiene. Students learn about dental sealants and dental form for the treatment of patients. Covered are the standardized systems of charting dental conditions, coronal polishing, restorative dentistry, tooth identification, and cavity classification as well as how to interpret the charting to the dentist with whom they work with or referrals to a dental practice.

Module 12: Dental Photography

This study unit introduces students to the fundamentals and dental photography equipment selection including the right camera gear and accessories used for clinical photography in the dental practice. The science behind the camera system, and the basics of handling the camera, parameter adjustments, knowing its significance, framing, shooting, proper equipment safety and management and how to take photographs in a clinical setting in QuickTime with optimized patient comfort are discussed. Students also learn post-processing with the help software and preparing images for clinical presentations.

DA 104 Lab: Matrix Systems, Moisture Control & Instruments Review & CPR

Students will develop the necessary skills to perform and/or assist in restorative procedures with a focus on Class II composites and quadrant completion. Removable Prosthodontics are covered to enhance the students' knowledge in the adjustment and delivery of prosthetics. Students will perform procedures within a time limit to stay on schedule and produce quality restorations. Students will work in teams to further develop their soft skills needed in the dental industry. This unit teaches margin identification and retraction cord placement, troubleshooting cementation of permanent restorations, the distinction on what is heavy occlusion on a restoration and where to make adjustments. The placement of the tofflemire matrix and matrix free systems along with correct wedge selection and placement and an understanding of point angle and line angle is also demonstrated and discussed.

Module 8: Basic Radiology

This study unit introduces students to radiology, the use of X-radiation to study and diagnose conditions inside the tissues of the body. Topics such as radiation safety, how x-rays affect tissue, and how to protect yourself and the patient from radiation overexposure are taught. Students are instructed on how to produce x-rays using available electrical current, how to produce a radiograph, the parts of the dental x-ray machine and how to take care of and handle dental film as well as how to expose radiographs using a technique called paralleling. The qualities of a good diagnostic radiograph, how to process the exposed radiograph, how to avoid processing, exposure errors that may interfere with the diagnostic quality of the film, and how to prepare films for mounting and interpretation are covered. This unit will teach students how to use the bisected-angle technique to correct dimensional errors associated with placement difficulties.

DA 105 Lab: Dental Radiology & RHS Exam Prep

Students demonstrate procedures for preparing the patient for dental x-rays, assembling the Universal Measurement and Calibration Protocol (XCP)instruments/eezee grip holders, using traditional and digital equipment, performing radiographic surveys using both paralleling and bisecting techniques, processing, mounting and critiquing while adhering to radiation safety precautions and infection control standards. Dexter mannequin training is done in class (4 sets of x-rays, processing, critiquing and mounting) and the clinical portion will be done on 4 patients. One FMX (full mouth x- ray) will be done in class with regular film. The remaining 4 patients required can be done on a scheduled clinical rotation with either regular film or digital.

Students learn basic x-ray techniques including how to take a full mouth series of x-rays. Students are required to take x-rays, develop and mount radiographs. Students also learn about Bitewing x-rays (BWX): how to position the patient; how to position the film; using digital film for each group of teeth needed for BWX; how to position film so that all contacts are open; how to position film so that the BWX is symmetrical and what to do when patient has a very small mouth, gag reflex or other complications. Practice is also done using the bisecting technique with Rinn holders, paralleling technique without holders (as needed), proper mounting of individual, BWX and complete series, tooth identification landmarks, upper versus lower, and right versus left.

Module 10: Fixed Prosthodontics Parts 1 & 2

This study unit introduces students to the preparation, making, and placement of indirect restorations including crowns, inlays, onlays, veneers, and bridges. Students will learn how to identify the indications and contraindications for fixed dental prosthodontics, the components of a fixed bridge, the steps for a diagnostic workup, and the role of the laboratory technician. Core buildups, pins, and posts in crown retention and the function of provisional coverage for a crown or fixed bridge including the placement and removal of a gingival retraction cord, and how to assist in the preparation and cementation procedures of an indirect restoration.

Module 11: Removable Prosthodontics & Dental Implants

In this study unit, students will learn about topics related to removable prosthodontics including both partial and full dentures, assisting in the delivery of a partial or full denture, procedures for assisting in a wax denture try-in, and patient education relating to removable partial and full dentures, along with immediate dentures, overdentures, and denture relining and repairs. Students are introduced to the pathologic conditions of the oral cavity, the categories of diagnostic information, oral lesions, diseases of the oral soft tissues, conditions of the tongue, oral cancer, the oral manifestations of Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS), developmental disorders along with other disorders including abrasion, attrition, bruxism, bulimia, and orofacial piercings. Covered are topics related to dental implants including the indications and contraindications to implants, the patient's psychological evaluation, dental examination, medical history, and evaluation of the dental implant, specialized radiographs, diagnostic casts, surgical stents, and the types of dental implants and how to properly prepare for implant surgery and proper follow-up care.

DA 106 Lab: Room Setup, Mock Chairside Assisting

Students learn and demonstrate four handed dentistry, including but not limited to operatory set up, instrument transfer, isolation techniques (how to use cotton rolls, dry angles, and rubber dams), suctioning (use of high-volume suctions and low - volume suction including how to keep the patient comfortable during a dental procedure, how to hold the high-volume suction so that it efficiently removes liquid and saliva without suctioning the patients' cheeks, tongue or other oral structures), and learn the basic procedural tray set ups.

Module 3B: Coronal Polishing & Sealants

Students will learn how to identify the types of stains, deposits and assist in coronal polishing and are able to understand the role of the dental assistant in providing support during polishing procedures.

Students will have the opportunity to learn about dental sealants, including the clinical indications for and contraindications to dental sealants and the rationales for filled and unfilled sealant materials. Students will learn and describe the two types of polymerizations, explain the most important factor in sealant retention, and demonstrate the steps in the application of dental sealants as it relates to the patient and operator.

DA 107 Lab: Coronal Polishing & Sealants

Coronal Polish - Students will train in using a slow-speed handpiece, learn the principles of coronal polishing, practice operator & patient positioning/ergonomics, polishing coronal surfaces of teeth using preferred polishing technique, polishing agents, practice coronal polish on typodonts, coronal polish and practical with disclosing solution.

Dental Sealants – Students will learn the armamentarium needed to place sealants, compare the various types of sealant material, educate patients and/or parents with regards to sealants, state the negative aspects of acid etching, practice the various methods of moisture control necessary when applying sealants, prepare a tooth for a sealant including isolation and acid etching, seal a tooth following a predetermined regimen, and self - evaluate the success of sealant placement.

DA 108: Online Final Exam

The online Final Exam portion will consist of 50 to 100 multiple-choice questions concerning all subjects covered in the online lectures' component of the program.

DA 108 Lab: Chairside Economical Restoration of Esthetic Ceramic (Cerec), Procedures & Practical Final Exam

Students will understand how to utilize CEREC technology to restore bridges and implants.
They will learn to recognize ideal preparation designs for inlays, onlays, veneers and crowns, the different design techniques of Biogeneric Individual, Biogeneric Copy, and Copy and Mirror and how they work and when to use them. Students will navigate through hands-on CEREC workstations with stain and glaze exercises. Students learn ideal polishing techniques for esthetic restorations, cementation techniques, and fabrication of inlays, onlays, crowns, bridges.
The Practical Final Exam consists of mock dental assisting for dental procedures (Station 1 -evaluation of proper patient position, proper suction placement, and proper instrument transfer), (Station 2 - Radiology) (Station 3 - taking impression, pouring up impression in yellow stone, trimming model), (Station 4 - making temporary crown) (Station 5 - Sterilization and Infection Control) (Station 6 - Charting and Dentix Ascend).

Externship (40 hours)

The externship is designed to expose students to a working schedule and responsibilities of a dental assistant. After students have completed all requirements of weeks one (1) through 10 of the program, they will be assigned to a two (2) week rotation schedule in a dental practice. It is the student's responsibility to ensure adequate travel to and from the externship site.
The externship is typically scheduled during the office hours of the assigned practice but may involve early morning/evening hours as well, based on the needs of the practice.