



MCP's Premium Dental Assistant courses will teach students the techniques and skills required to become a valuable dental assistant.

## ACADEMY CURRICULUM – DENTAL ASSISTANT PROGRAM

The Academy's **14-week Dental Assisting Program** comprises of 216 total course clock hours:

- 38 lecture hours,
- 64 laboratory hours (including 2 hours obtaining CPR Certification from the American Red Cross),
- 14 hours of Distance Education (online Dale Foundation DANB RHS),
- 50 hours of clinical and patient training, and
- 50 hours of externship with a local practicing dentist.

Each class period is 4 hours in length and meets Tuesdays and Thursdays for 29 classes. Lectures, laboratory sessions and clinical training are followed by two weeks of externship at the end of the program. Patient clinicals are when students work directly with patients during scheduled clinic hours. **Classes are taught as shown and the prerequisite for each class is completion of the previous class. There are 4 scheduled Saturday classes (8 hours long) in weeks 4 (Coronal Polishing), 6, 7 (radiology), and 8 (Plaster Lab). Saturday lab/clinical classes are 4 hours in the morning and 4 hours in the afternoon following lunch break.**

### *DENTAL ASSISTANT PROGRAM VOCATIONAL OBJECTIVES, GOALS AND OUTCOMES*

Students will be exposed to the necessary clinical techniques required in the dental care environment. It is the goal of the Academy is to train students to a level of proficiency that will allow them to qualify for immediate employment at a dental practice upon completion of the course.

The **Dental Assisting** program's goals are to train and educate students to:

- Assists the dentist during a variety of treatment procedures.
- Take and develops dental radiographs (x-rays).
- Record patients' medical history and take blood pressure and pulse.
- Serve as an infection control officer, developing infection control protocol and preparing and sterilizing instruments and equipment.
- Help patients feel comfortable before, during and after dental treatments.
- Provide patients with instructions for post procedure oral care.
- Teach patients appropriate oral hygiene strategies to maintain oral health.
- Takes impressions of patients' teeth for study casts (models of teeth).
- Perform general office tasks including such task that may require the use of a personal computer.
- Communicate with patients and suppliers (e.g., scheduling appointments, answering the telephone, billing and ordering supplies).
- Helps to provide direct patient care in all dental specialties, including, pediatric dentistry, periodontics and oral surgery.

### **Type of Certificate Award**

A Certificate in Dental Assisting is awarded after the Dental Assisting Program has been completed, when externship requirements are fulfilled, the student has an overall grade of 85% or greater and all financial obligations are satisfied and/or current.

**Class Schedule:** For 2020, Tuesday and Thursday evening and Saturday Clinica/Lab classes are offered as announced for requirements leading to DANB certifications. Tuesdays and Thursdays from 6:00 pm to 10:00 pm. There are 2 x 10-minute breaks; one at 7:50 pm and another at 8:50 pm. Additional breaks will be at the discretion of the instructor and may extend the hours of class accordingly.

Saturday classes are from 8:00 am to 5:00 pm. There are 2 x 10-minute breaks; one at 9:50 am and another at 2:45 pm. There is a one-hour lunch break; from 12:00 pm to 1:00 pm.

One class hour is 50 minutes in length.

**Legend:** LE-Lecture LA-Laboratory CL-Clinical EX-Externship DE-Distance Edu TOT-Total HW-Homework

COURSE	COURSE DESCRIPTION
DA 101	Generalized Introduction to Dental Terminology and Equipment
	Clinical Infection Control Video Platform
	Total
DA 102	<b>Human Dentition, Anatomy, Dental Charting</b>
	In Class: Human Dentition & Dental Charting Videos
	Total
DA 103	Four-Handed Dentistry Essentials
	Assignment: Clinical Patient Exam & Chairside Assisting Video Platform
	Total
DA 104	Dental Radiology
	Online: Clinical Radiology Video Platform
	Total
DA 105	Crown and Bridge
	In-Class: Crown Preparation Clinical Video Videos
	MID-TERM EXAM
	Total
DA 106	Plaster Labs and Models
	Assignment Clinical Amalgam Restoration Video Platform
	Total
DA 107	Oral Surgery, Periodontics, Anesthetics
	Assignment: Anesthetic Delivery & Oral Surgery Video Platform
	Total

COURSE	COURSE DESCRIPTION
DA 108	Endodontics and Orthodontics
	In Class: Braces Videos: Common Cases, Crowding, Under Bite, Cross Bite & Bonding Procedure
	Total
DA 109	Office Procedures, Dentrrix, Job Preparation
	Total
CPR	Red Cross Center: 2 Hours CPR CERTIFICATION
DA 110	Final Theory/Practical Exam
DALE	Online: Radiology Online Course - 13 modules to be completed
	Total
CLN 101	Patient Clinicals
EXT 101	Dental Assistant Externship
	Grand Total = Curriculum Class Hours + Clinicals+ Online + Externship

### *DENTAL ASSISTANT COURSE DESCRIPTION*

#### **DA 101 - Generalized Introduction to Dental Terminology and Equipment**

Explanation of homework assignments in the textbook and demonstration of the simulation software and other videos. Office tour and orientation/operation of all equipment. View patient education videos to get an idea as to the scope of modern dental treatments available. Students are oriented to the Academy 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.

Review divisions of specialties in dentistry; Review professionalism, dress and personal appearance; HIPPA regulations as related to patient confidentiality. Discussions covering 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 practice. And how to wash hands properly, learn how to use the ultrasonic and autoclave correctly; Disinfection control and procedures and placing barriers in the treatment rooms, plaster rooms, sterilizer rooms and in the dental practice. Cover mechanisms of disinfection, sterilization, OSHA, MSDS sheets. The goals of infection control are discussed together with Occupational Safety and Health Administration (OSHA) requirements and standards.

Demonstrate set-up and teardown of treatment rooms, equipment and instruments etc., preliminary introduction to 4-handed dentistry theory and practice. Operation and positioning options of various dental chairs, lights, handpiece set-up and handpiece bur-changing, three-way syringes, etc.

## **DA 102 – Human Dentition, Bones of the Head, Tissues Surrounding the Teeth, Head & Neck Anatomy, Dental Charting**

Students will learn the form and structures of the human natural teeth in the dental arch. Topics also include the method of identifying teeth by reviewing using the Universal Numbering System for permanent and primary teeth. Tooth identification by name, number and letter; Review Oral Anatomy, including structures and tooth surfaces. Introduction to tooth nomenclature, dental anatomy and “landmark teeth.”

Students will learn the basic anatomy and physiology of the human skull. They will learn in more detail about the human dentition, tissues surrounding the teeth and head, as well as the anatomy of the neck. Topics include the cranium and bones of the face, the Temporomandibular Joint (TMJ) and muscles of mastication. Students will learn about the tissues supporting the human teeth including the alveolar process, the periodontal ligament and the gingiva (gums) which are collectively known as the periodontium.

The students are taught and asked to prepare a dental chart using appropriate symbols and abbreviations using hand charts and in Dentrix Patient Management Software. Students will learn how to document the present dental conditions of the patient and the dental services to be rendered. This serves as a legal record of the patient. The student will demonstrate proficiency in patient positioning and dental lighting.

## **DA 103 - Four-Handed Dentistry Essentials**

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 patient’s cheeks, tongue or other oral structures).

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 cartridge into syringe and place needle onto syringe. Anesthetic syringes and local anesthesia; transfer to the dentist, needle-stick prevention and proper sharps waste disposal.

Techniques on patient management and communication, from entering the office to finishing with appropriate transfer to the front desk personnel. How to greet patient in the reception area and escort patient to operatory and place bib. Patient positioning in the dental chair for different anatomical locations in the oral cavity, (including patient position for: maxillary tooth or teeth in the right and left quadrants, mandibular tooth or teeth in the right and left quadrants) and the proper positioning of dentist and dental assisting in each for mentioned quadrant. Practice using the TRANSFER ZONE exclusively. Practice in the use of cotton rolls to isolate various areas, if a Dental Dam is not being used, dental handpieces, and bur types explained and demonstrated. Handpiece maintenance will be reviewed again as an adjunct to DA 101, including oiling, how to use the Assistina equipment, chuck evaluation and how to sterilize handpieces for safety and cleanliness. Sterilization Review.

Students will have the opportunity to learn about preventive dentistry and the role of the dental assistant. They will learn that preventive dental care requires effective patient education, correct assessment and use of fluorides, a plaque control program and nutritional considerations. Students will also have the opportunity to learn about types of toothbrushes and brushing techniques along with procedures for assisting patients with dental floss, mouth rinses, oral irrigation devices and proper cleaning of dentures.

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. Appropriate protective attire for both dental professionals and patients. Dental sealants. Advanced Six-Handed dentistry techniques (using videos).

Pediatric Dentistry - Procedures completed on pediatric patient including, fillings, stainless steel crowns, pulpotomy and what instruments are used and what materials are used to cement SSC and what material is used in pulpotomy. Students are taught to setup trays for the pulpotomy and stainless crown placement procedure. A clinical video of a pediatric crown preparation is shown during this session.

Students will receive didactic instruction on rationale, stains and deposits, methods, equipment and materials, and infection control, followed by a written exam. Students will learn the various steps and instruments used in sealing, prophylaxis and coronal polishing. Students review the techniques in passing periodontal instruments and assembling the ultrasonic scaler correctly. Additionally, they will be taught the process of removing stained and soft deposits from the clinical crown of a tooth.

Upon successful completion of the written exam, students will begin clinical instruction to allow for the development of coronal polish skills. The laboratory and clinical activity will include use of a hygiene slow speed handpiece, principles of coronal polish, armamentarium, operator and patient positioning, polishing technique, polishing agents, and polishing coronal surfaces of teeth. The state laws and regulations that guide dental assistants. Students are thoroughly prepared for the State and DANB National Coronal Polish Exam.

### **DA 104 - Dental Radiology**

Student will demonstrate procedures for preparing patient for dental X rays, assembling XCP instruments/eezee grip holders, using traditional and digital equipment, perform 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 on each other, with regular film. The remaining 4 patients required can be done on a scheduled clinical rotation with either regular film or digital.

Students will learn basic x-ray techniques. They will also learn how to take full mouth series of x-rays. Students will be required to take x-rays, develop and mount radiographs. Students will also learn about Bitewing x-rays: how to position the patient, how to position the film, using digital film for each group of teeth needed for Bitewing x-rays, 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 bisecting technique using Rinn holders, paralleling technique without holders (as needed), proper mounting of individual, Bitewing and complete series, tooth identification landmarks, upper versus lower, right versus left.

FMX (full mouth x-ray) - what it is, how to take them and how to mount x-rays. FMX sorting exercises on interactive platform and simulation software, expose and process all types of intra-oral and extra-oral radiographs on fellow students.

Periapical x-ray – how to position the patient, how to position the film or digital film to capture the apex of desired tooth, including different positioning required for maxillary dentition and mandibular dentition and what to do when patient has a very small mouth, gag reflex or other complications, such as large tori.

Panorex – how to position the patient for a panoramic x-ray including chin position, remembering to remove all jewelry, hair pins or piercings, general information about Panorex machines and how and why they are vital to dental health.

Cephalometric x-ray – how to position the patient to get symmetrical head x-ray, capturing soft tissue and hard tissue, remembering to remove all jewelry, hair pins or piercings, general information about why orthodontists use this x-ray.

All students who pass the written didactic examination will be allowed to begin the laboratory instruction.

Students are thoroughly prepared for the State and DANB National RHS and Infection Control Exam.

Students must attend class 2 consecutive Saturdays to complete their Radiology Lab and Clinical in week 5: 1<sup>st</sup> Saturday Lab 8:00 am – 5:00 pm. Second Saturday Clinical 8:00 am - 5:00 pm.

### **DA 105 - Crown and Bridge**

A description of crowns and why they are needed. The topics covered: the materials crowns are made out of, how to set up operatory for 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 dentists mirror clean, how to mix build up material and learn what a buildup is, how to pack cord, how to mix impression material and place in tray for doctor to take impression and what impression material the doctor uses around the crown preparation, how to make temporary restoration using luxatemp and tempbond (cover other materials available for temporaries, e.g. Aluminum crown forms). The students will learn the different types of fixed prosthodontics restorations. Removable Prosthodontics (RPD) replaces missing teeth. The students will learn the component parts of both the partial and complete RPD's and the various steps necessary to take during replacement appointment with patient.

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

Students will learn the procedure performed if the pulp of a primary or newly erupted permanent tooth has been exposed. Students are taught to setup trays for the pulpotomy and stainless crown placement procedure. A clinical video of crown preparation is shown during this session.

Review of Shade Guides and how to use.

### **DA 106 - Plaster Labs and Models**

Theory, chemistry, selection and techniques of the preparation, placement and finishing of these restorations will be discussed, along with proper mixing, isolation, bonding, curing and adjustments needed after placement. Curing light types, curing light safety, hygiene and proper cooling of the target area.

Fillings - different types of fillings including 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, how to mix glass ionomer 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 dentist adjusts patient bite; The dental assistant will learn how to discharge a patient properly,

including offering mouth rinse, post-operative instructions and hand off to front administrator. The dental assistant will learn what needs to be included in tub or tray for dental fillings, what each item is used for and why it is needed.

Alginate impression of lower arch only, review different types of alginate, review how to flavor, review how to use colorized version, review ratio of powder to water, review how to mix, review how to load tray, review how to place tray in patients mouth, review how long to wait for alginate to set up, review how to remove set up alginate from patients mouth (lower arch only on this day).

The student will learn about the many types of cements, including permanent cement (e.g. Zinc phosphate cement) and temporary cements (e.g. Rely X, Duralon, Variolink), Tempbond with and without eugenol); How to mix IRM, how to mix glass ionomer cements, how to mix resin cements; How to mix cements with proper ratios of component parts, how long to mix each type of cement, what consistency each should have when ready to use and when cured; How to mix or hand the dentist liners such as - using dycal, copalite and vitrebond liner.

Alginate – different types of alginate, how to flavor, colorized version, ratio of powder to water, how to mix, how to load tray, how to place tray in patients mouth, how long to wait for alginate to set up, how to remove set up alginate from patients mouth (upper arch only on this day).

Model pouring and trimming – How to mix yellow stone, what ratio of stone to water, how to measure each, how to mix, how to use vibrator, how to get proper pour with minimum bubbles, how long for stone to set, how to remove set up 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).

#### **DA 107 - Oral Surgery, Periodontics, Anesthetics**

Presentation and discussion of the various oral and periodontal surgical instruments and techniques. Discuss and demonstrate the use of the various instruments, throat packs, surgical suction uses and techniques, sterility and instrument scrubbing techniques, intro to dental lasers, limitations and safety of dental lasers. Lower alginate impression techniques. Nitrous oxide: an introduction.

Oral surgery – learn instruments, including different types of forceps, elevators, root picks, tissue retractors, surgical suction, suturing instruments (scissors and hemostats) scalpels, rongiers, oral surgery handpiece and oral surgery burs, review oral surgery procedures, (e.g. general extractions, 3rd molar extractions, implant placement, bone graft, biopsy) and how to assist for each procedure, how to keep a sterile field and learn what cross contamination is and how to avoid it.

Periodontal Surgery – learn instruments, including different types of scalers and currettes, review periodontal surgery procedures (e.g. implant placement, bone graft, biopsy, tissue regeneration) and how to assist for each procedure, how to keep a sterile field and learn what cross contamination is and how to avoid it.

Sterilization Procedures – how to scrub instruments, how to soak instruments, how to bag and sterilize instruments, including safety measures for each step. What instruments are autoclaved and what instruments are placed in cold sterile. Review of how to maintain handpieces and how to sterilize.

Nitrous Oxide – the machinery, how it works, the advantage of using N<sub>2</sub>O and state law governing who dispenses N<sub>2</sub>O.

## **DA 108 - Endodontics and Orthodontics**

Endodontic theory and various techniques. Review the uses of Dental Dams, manual and mechanical instrumentation, Radiography pertinent to endo, irrigants, medicaments, Apex locators, temporary and final restorations. An introduction to orthodontics – fixed appliances (braces), removable appliances, clear aligners.

Endodontic Procedures – What a root canal is and why it is needed. How to test a symptomatic tooth – with cold spray, tooth slooth and pulp tester. Demonstrate actual working length radiographs and discuss, show ZX apex locator, demonstrate caviti and/or endotemp. How to set up operator for RCT procedure, (instruments used (e.g. Burs, handpiece, condenser, endodontic files broaches, peeso reamers, (mechanical as well as rotary) and materials needed including, gutta-percha, sealer). Review of rubber dam placement. How to assist during a RCT, where to place suction, how to keep the doctor's mirror clean and clear, how to hand the doctor endodontic files in the correct order, how to mix sealer, how to hand sealer to the doctor, how to hand gutta-percha and how to use thermal instrument to heat gutta-percha if the doctor wants that technique. How to mix build up material or how to use Cavit (temporary filling material).

Orthodontic procedures – describe different types of braces and retainers. How to retie using colored elastics and ligature ties. Classification of bite Class I, Class II and Class III. Demonstrate orthodontic models and review impression techniques for same.

## **DA 109 - Office Procedures and Dentrix**

Office procedure include telephone techniques, front office administration and how it applies to the dental assistant, including making appointments, billing, checking patients in and out. Practice proper phone answering techniques on each other, role-play making appointments, asking for money and making payment arrangements. Students will learn the importance of first impressions on a new patient, welcoming a new patient. Soft skills are taught to a high proficiency level. Review of Dental insurance terms. Insurance codes and filing dental insurance.

Dentrix- Patient Charting – Students will learn how to chart existing conditions, and treatment plans, using procedure buttons and codes. Additionally, they will gain knowledge in how to write up a clinical chart and progress notes, and customize the patient chart.

Perio Charting - Proper recording of pocket depths, bleeding points, suppuration, mobility and furcation grades. Learn how to work with hygiene templates in the clinical notes, and customize navigation systems.

Treatment Planning - Phasing treatments and preparing a professional looking written presentation for patients. Students will also learn how to pull in disclaimers to customize treatment plans along with track lab cases.

Scheduling - Basic front office functions that all assistants and hygienists need to know for following up on patients. This includes scheduling, treatment plan reports, recare reports, family file, and scanning documents.

Review of Charting and Treatment Planning.

All OSHA regulations will be discussed as it pertains to the dental assistant.

### **DA 110 - Final written exam and practical clinical exam;**

The didactic portion will consist of 50 to 100 multiple choice questions concerning all subjects covered in the lecture and laboratory component of the program.

The clinical assisting practical will consist of mock 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 Dextrix).

### **CLN 101 – PATIENT CLINICALS + LAB CLINICALS – (50 hours)**

Students will schedule 2 hours per week of patient clinical training/shadowing experience (20 hours) during the week and during normal practice hours. Students are introduced to the members of the dental team, current professional trends and the various operations within a dental practice, including receptionist duties, bookkeeping and chairside dental assisting. Students will have the opportunity to observe, shadow and participate in our dental practice operation. In lab clinicals, students will perform documented certification labs for radiology, coronal polishing, and infection control on mannequins, students, and volunteer patients.

### **EXT 101 - EXTERNSHIP - (50 hours)**

The externship is designed to expose the trained students, once they have completed the initial lecture, laboratory, clinical and final examination components of the program, to the entire dental practice environment, to round out their training program and prepare them for employment in a dental practice. The student will be assigned to a 2-week rotation in the dental practice. Travel will be required to externship sites. This course requires a final evaluation and timecards (provided) and further prepares students for employment as a dental assistant. 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 clinic. Students may not miss more than 10 hours which are required to be made up in order to receive their transcripts.

(Prerequisite: Dental Assisting Program Week 1 through Week 12, CPR Certification, DANB RHS, Infection Control, and Coronal Polishing Certifications)