



Tyler Junior College  
1530 SSW LOOP 323, Tyler, Texas 75701  
[www.tjc.edu/continuingstudies/mycaa](http://www.tjc.edu/continuingstudies/mycaa)  
Contact: Judie Bower | (800) 298-5226 | [jbow@tjc.edu](mailto:jbow@tjc.edu)

## **Education & Training Plan** **Dental Assistant Certification Program with Externship**

Student Full Name: \_\_\_\_\_

Start Date: \_\_\_\_\_ End Date: \_\_\_\_\_

**Program includes National Certification & an Externship Opportunity**  
**Mentor Supported**

### **Tyler Junior College Program with Externship**

Course Code: TJC-DA 03  
Program Duration: 6 Months  
Course Contact Hours: 750  
Student Tuition: \$3,950

### **The Dental Assisting Profession**

The Dental Assisting Program prepares students for entry-level positions in one of the fastest growing healthcare professions – Dental Assisting. With the national increase in healthcare-related services, and the national shortage of healthcare professionals, the need for dental assistants is growing substantially. With a growing workforce over 300,000 strong, a career in dental assisting ranks as the fourth fastest growing occupation in the healthcare technician field. To meet our nation's growing medical demands, recent studies indicate that over 400,000 assistants will be employed by 2022.

### **The Dental Assisting Program**

The program prepares students for entry-level positions as a chair-side dental assistant. This course covers the history of dentistry, introduction to the dental office, the legal aspects of dentistry, introduction to oral anatomy, dental operator, introduction to tooth structure (primary and permanent teeth), the oral cavity; and other areas. The purpose of this program is to familiarize students with all areas of administrative and clinical dental assisting focusing on the responsibilities required to function as an assistant in a dental practice.

This course covers the following key areas and topics:

- Introduction to the dental office and history of dentistry and dental assisting
- Legal aspects of dentistry including policies and guidelines

- Introductory oral anatomy, dental operator, and dental equipment
- Introductory tooth structure including primary and permanent teeth
- The oral cavity and related structures
- Dental handpieces, sterilization, and other areas

### **Education and Certifications**

- Students should have or be pursuing a high school diploma or GED.
- There are several National Certification exams that are available to students who successfully complete this program:
  - Dental Assisting National Board (DANB) National Entry Level Dental Assistant (NELDA) exam
    - DANB's NELDA certification consists of three component exams:
      - Dental Assisting National Board (DANB) Radiation Health and Safety (RHS) exam
      - Dental Assisting National Board (DANB) Infection Control (ICE) exam
      - Dental Assisting National Board (DANB) Anatomy, Morphology and Physiology (AMP) exam
  - CPR, BLS or ACLS from a DANB-accepted provider
    - CPR certification voucher will be provided to students for CPR class by a DANB accepted provider

**Note:** Students meet the NELDA exam eligibility requirements via Pathway I:

1. Graduation from a dental assisting program located within a post-secondary institution that is accredited by an organization recognized by the U.S. Department of Education, AND
2. High school graduation or equivalent, AND
3. Current hands-on CPR, BLS or ACLS from a DANB-accepted provider

### **Dental Assisting Detailed Course Information:**

- The dental assisting profession and the history of Dental anatomy and physiology
- Tooth charting, tooth surfaces, and classification of restorations on a tooth
- Parts of the jaw, areas of the mouth, oral health and preventions of dental disease
- Infection control in dentistry and occupational health and safety
- Patient information and assessment
- Foundation of clinical dentistry
- Dental radiology
- Single crown restoration, bridge, implant, partial denture, and full denture
- Dental equipment, accessories and the treatment room, hand pieces & accessories
- Dental cements and impression materials; Assisting in comprehensive dental care
- Coding of radiology services and the use of ICD-9-CM codes
- Dental administration and communication skills

### **National Certification**

Students who complete the Tyler Junior College Dental Assistant program will be prepared to sit for the Dental Assisting National Board (DANB) National Entry Level Dental Assistant (NELDA) national certification exam(s). In order to work as a Dental Assistant, many states nationwide are requiring that learners achieve national certification prior to working in that state. Students who complete this program are encouraged to complete the practical/clinical externship option with their program. This

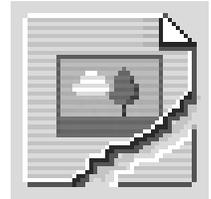
comprehensive program is designed to prepare students to sit for Dental Assisting National Board (DANB) National Entry Level Dental Assistant (NELDA) exam(s). Students who complete this program can and do sit for the Dental Assisting National Board (DANB) National Entry Level Dental Assistant (NELDA) national certification exam(s) and are qualified, eligible and prepared to do so.

### **Externship / Hands on Training / Practicum**

Although not a requirement, once students complete the program, they have the ability to participate in an externship and/or hands on practicum so as to practice the skills necessary to perform the job requirements of a professional in this field. Students will be assisted with completing a resume and/or other requirements necessary to work in this field. All students who complete this program are eligible to participate in an externship and will be placed with a participating organization near their location. The institution works with national organizations and has the ability to place students in externship opportunities nationwide.

**Tyler Junior College contact:** If students have any questions regarding this program including national certification and externships , **they should call Judie Bower of Tyler Junior College at | (800) 298-5226 or via email at [jbow@tjc.edu](mailto:jbow@tjc.edu)**

**Note :** No refunds can be issued after the start date published in your Financial Award document.



## About Tyler Junior College!

Welcome to Tyler Junior College! One of the oldest junior colleges in Texas, the College was established in 1926 with a mission of providing the finest academic education for freshmen and sophomore students. Tyler Junior College remains committed to that goal while also recognizing the changing role of community colleges and the need to provide quality training for technical fields. There are several unique aspects of the healthcare career programs available to students through the School of Continuing Studies at Tyler Junior College (TJC). In addition to enrollment of over 32,000 students annually, Tyler Junior College (TJC) has been the Texas leader in healthcare technician training and education programs for over 12 years. Over the last 12 years, approximately 13,000 students have successfully completed TJC's Pharmacy Technician, Dental Assisting, Medical Billing & Coding, Clinical Medical Assistant and other healthcare programs.

[www.tjc.edu/continuingstudies/mycaa](http://www.tjc.edu/continuingstudies/mycaa)



## Tyler Junior College and Pearson Education

Tyler Junior College's eLearning programs were developed in partnership with Pearson Education to produce the highest quality, best-in-class content and delivery necessary to enhance the overall student learning experience, boost understanding and ensure retention. Pearson Education is the premier content and learning company in North America offering solutions to the higher education and career training divisions of colleges and universities across the country aimed at driving quality education programs to ensure student success. Please visit us at [www.pearson.com](http://www.pearson.com).

## About Pearson Education

Welcome to Pearson. We have a simple mission: to help people make more of their lives through learning. We are the world's leading learning company, with 40,000 employees in more than 80 countries helping people of all ages to make measurable progress in their lives. We provide a range of education products and services to institutions, governments and direct to individual learners, that help people everywhere aim higher and fulfil their true potential. Our commitment to them requires a holistic approach to education. It begins by using research to understand what sort of learning works best, it continues by bringing together people and organizations to develop ideas, and it comes back round by measuring the outcomes of our products.

## Dental Assistant Program Detailed Objectives

## **HISTORY OF DENTISTRY**

- Explain the role of Hippocrates in history
- Name notable figures in dental history
- Define the concept of professionalism
- Explain the role and purpose of the professional associations in dentistry
- Identify the various roles of dental assistants
- Name the members of the dental healthcare team and describe their roles
- Name and describe each of the recognized dental specialties

## **DENTAL ETHICS AND LAW**

- Explain the difference between being legal and being ethical
- Define the basic principles of ethics
- Explain the purpose of the state dental practice act
- Summarize the circumstances required for patient abandonment
- Describe how to make corrections to a patient's record

## **GENERAL ANATOMY AND PHYSIOLOGY**

- Define the difference between anatomy and physiology
- Identify the body planes and associated body directions, the body systems, cavities, and regions
- List the components of a cell
- Identify and describe the four types of tissues in the human body
- Name and locate each of the eleven body systems and their functions
- Describe the signs and symptoms of common disorders related to each body system

## **HEAD AND NECK ANATOMY**

- Identify the structures of the head and neck
- Name the landmarks of the maxilla and mandible
- Identify the components (and their functions) of the temporomandibular joint (TMJ)
- Locate and identify the muscles of the head and neck, including the muscles of mastication, floor of the mouth, tongue, and facial expression
- Identify and trace the routes of the blood vessels and nerves of the head and neck

## **THE FACE AND ORAL EMBRYOLOGY**

- Define intraoral and extraoral
- Identify the landmarks and functions of the face and oral cavity
- Name the stages of embryonic development and the associated histology of structures
- Explain the process of facial and palatal development
- Describe the stages and dates of tooth development, eruption, and exfoliation
- Name the tissues that comprise teeth and their supporting structures

## **TOOTH DEVELOPMENT**

- Summarize the differences between primary, mixed, and permanent dentition
- Explain the stages of tooth development, root formation, eruption, and deformities that can occur
- Explain the eruption and exfoliation sequences for the primary and secondary teeth

- Describe the makeup of the teeth

## **DENTAL CHARTING**

- Identify the names and surfaces of the primary and secondary teeth
- Describe the function and features of teeth
- Explain the difference between ideal occlusion and malocclusion
- Describe the different charting systems, the common charting symbols, and abbreviations

## **ORAL PATHOLOGY**

- Identify the signs of inflammation
- Name lesions according to the location and appearance and causative factor
- Summarize specific lesions of the oral cavity
- Describe oral conditions related to developmental issues

## **MICROBIOLOGY**

- Define common terminology used in microbiology
- Name the major groups of microorganisms
- Name common bacterial and viral diseases
- Identify the primary bacterial component in dental plaque

## **DENTAL DISEASE AND INFECTION CONTROL**

- Describe a pathogen
- Explain the chain of infection
- Describe the difference between acute, latent, and chronic infections
- Summarize the transmission of disease in a dental office
- List the steps for universal and standard precautions and their importance in the dental office
- Demonstrate proper hygiene and waste management techniques

## **DENTAL CARIES AND PERIODONTAL DISEASE**

- Explain the process of dental caries and the affected areas of teeth
- Identify the causative bacteria of dental caries
- Summarize the types of dental caries and the importance of saliva
- Explain caries detection and intervention methods
- Describe the difference between healthy periodontium and periodontal disease
- Describe gingivitis and periodontitis and the different types of periodontitis
- Summarize how poor health habits, social habits, and systemic health problems affect the periodontium

## **ORAL HEALTH AND NUTRITION**

- Summarize the risks for dental disease
- Identify the benefits of fluoride and its application
- Discuss proper nutrition and the benefit of a balanced diet on oral health
- Identify the components and formation of plaque and calculus
- Explain the techniques for good oral home health care
- Identify the signs and symptoms of common eating disorders

## **INSTRUMENT PROCESSING AND STERILIZATION**

- Explain critical, semicritical, and non-critical items and how they are processed
- Describe how to transport contaminated items
- Explain how to clean instruments
- Summarize the use of the ultrasonic cleaner
- Explain how to package and sterilize instruments, and monitor the package indicators using an autoclave
- Identify the proper way to use liquid sterilants
- Summarize how to sterilize dental handpieces

## **OCCUPATIONAL HEALTH AND SAFETY AND WATER LINES**

- Identify the differences among regulations, standards, and recommendations
- Explain the roles of the ADA, FDA, EPA, and OSHA
- Summarize the potential hazards in the dental office
- Explain the information that is found on hazardous material labels
- Explain the wastes that are generated in the dental office and how each waste is disposed of
- Summarize how water is used in the office and the allowable bacteria limit
- Describe biofilm and patients who may be at risk for infection from biofilm
- Explain bacterial growth in waterlines and how to reduce the contamination level in waterlines

## **THE DENTAL OFFICE**

- Describe the key points of the Americans with Disabilities Act
- Explain the different areas within the dental office and their purpose
- Identify the importance of a reception area
- Explain the operation of the dental office

## **EXAMINATION AND TREATMENT PLANNING**

- Describe patient record confidentiality
- Detail how to make corrections within a patient record
- Describe how to record a patient history and how to update and record changes
- Identify the order for an ideal care plan
- Explain the process of an extraoral and intraoral exam
- Describe the dental assistant's job during an exam

## **CARING FOR THE DENTAL PATIENT**

- Summarize the steps for greeting a patient and preparing them for treatment
- Describe ways to increase patient rapport
- Identify procedures to decrease patient anxiety and fear
- Summarize the vital signs and the procedures for taking them
- Name the normal values for the vital signs

## **DENTAL INSTRUMENTS**

- Name the dental handpieces and rotary instruments along with their features and functions
- Identify the uses and differences between low-speed and high-speed instruments

- Identify the various dental instruments and their uses
- Identify the various burs, their names, and their numbers
- Summarize handpiece cleaning and lubrication

## **ERGONOMICS**

- Describe the risk factors for injury in the dental office
- Summarize exercises that can minimize injury and increase muscle strength
- Explain four-handed dentistry, the zones, and the activities of each zone

## **MOISTURE CONTROL**

- Summarize the types of oral evacuation systems and their components
- Describe the role of the dental assistant in keeping a dry working field and the proper placement of the oral evacuators
- Identify isolation techniques and their placement
- Summarize the placement, use, and removal of dental dams

## **PHARMACOLOGY AND PAIN CONTROL**

- Describe the difference between the chemical, trade, and generic names of a drug
- Summarize the areas of a written prescription
- Describe drug reference materials
- List different methods to control pain
- Summarize the use of topical anesthetics
- Name the locations for injections in the arches
- Summarize other sedation and anti-anxiety agents

## **DENTAL RADIOGRAPHY**

- Describe ionization and radiation
- Name the components of a dental x-ray unit
- Summarize the effects of radiation on the body and the ALARA concept
- Explain the procedures for protecting the operator and the patient from radiation
- Describe why contrast and density are important in radiographs

## **DENTAL FILM AND PROCESSING PROCEDURES**

- Describe the components of dental film and the dental film packet
- Summarize the sizes of dental film and their uses
- Name the steps in dental film processing
- Summarize common errors in dental film processing and how to avoid them
- Describe the processing steps for both manual and automatic processing
- Identify sources of contamination during radiographic processing procedures
- Describe the dental assistant's role in maintaining the quality of radiographs

## **INTRAORAL RADIOGRAPHIC PROCEDURES**

- Describe preparing and positioning of a patient for radiographs
- Summarize the types of intraoral exposures

- Summarize the bisecting and paralleling techniques
- Explain radiographic techniques for edentulous, pediatric, or patients with gag reflexes

### **EXTRAORAL AND DIGITAL RADIOGRAPHIC PROCEDURES**

- Describe how to load extraoral cassettes
- Summarize how to prepare a patient for the various extraoral radiographic exposures
- List the radiographic errors and how to avoid them
- Explain digital radiography

### **DENTAL LINERS, BASES, AND BONDING SYSTEMS**

- Describe tooth sensitivity levels and which dental preparation material should be used
- Summarize cavity liners and varnishes and which ones should be used
- Explain the placement of dentinal sealers and dental bases and when they are used
- Summarize the bonding and etching processes

### **IMPRESSION MATERIALS AND LABORATORY MATERIALS AND PROCEDURES**

- Summarize when an impression is needed, how to mix the materials, and how to take an impression
- Identify the different tray types and sizes
- Explain the difference between a preliminary and final impression
- Describe how to sanitize the impression, wrap and pack it, write the instructions, and send it to a laboratory
- Explain how to create a gypsum model using an alginate impression and how to properly trim it
- Summarize the use of dental waxes and compounds
- Explain how to make a custom tray

### **GENERAL DENTISTRY AND MATRIX SYSTEMS**

- Summarize the steps of cavity preparation
- Name the cavity classifications, their preparations, and restorations
- Summarize the procedures that are often performed in operative dentistry
- Describe the purpose of various matrix bands and how to place them
- Summarize alternative matrix systems
- Identify the chemicals or substances present in tooth whiteners
- Describe the specific tasks of the dental assistant during tooth whitening

### **CORONAL POLISHING AND DENTAL SEALANTS**

- Explain the indication and contraindication for polishing
- Describe dental stains
- Summarize the polishing agents and their uses
- Explain the process for polishing, flossing, and polishing evaluation
- Describe the reasoning for and placement of pit and fissure sealants
- Name the indications and contraindications for pit and fissure sealants
- List the steps in the application of pit and fissure sealants

### **FIXED PROSTHODONTICS AND PROVISIONAL COVERAGE**

- List indications and contraindications for a fixed prosthesis
- Describe the differences among full crowns, inlays, onlays, and veneer crowns
- Identify the components of a fixed bridge
- Describe the function of provisional coverage for a crown or fixed bridge
- Discuss the indications for provisional coverage for a crown or fixed-bridge preparation
- Identify home care instructions for a patient with a permanent fixed prosthesis

## **REMOVABLE PROSTHODONTICS**

- Differentiate between a partial and a full denture
- Identify indications and contraindications for removable partial and full dentures
- List the components of a partial and full denture
- Describe the steps in the construction of a removable partial and full denture
- List home-care instructions for removable partial and full dentures

## **DENTAL IMPLANTS AND ENDODONTIC PROCEDURES**

- Discuss the indications for and contraindications to dental implants
- Identify the types of dental implants
- Describe the surgical procedures for implantation
- Describe the diagnostic testing performed for endodontic diagnosis
- Discuss the medications and dental materials used in endodontics
- Provide an overview of root canal therapy

## **PERIODONTAL AND ORAL SURGERY PROCEDURES**

- Explain the procedures necessary for a comprehensive periodontal examination
- Demonstrate periodontal charting
- Identify and describe the instruments used in periodontal therapy
- Describe the specialty of oral and maxillofacial surgery
- Identify specialized instruments used for basic surgical procedures
- Explain the role of an oral surgery assistant

## **PEDIATRIC AND ORTHODONTIC PROCEDURES**

- Discuss the pediatric patient including diagnosis and treatment planning for the patient
- Identify common dental traumas, emergencies, and signs of abuse and neglect
- Identify classes of malocclusion and how they apply to orthodontics
- Explain the phases of orthodontic treatment
- Identify tools utilized in the orthodontic practice

## **ASSISTING IN EMERGENCY CARE**

- Describe measures that should be taken to help prevent a medical emergency
- List the appropriate qualifications that a dental assistant must have for emergency preparedness
- Summarize the common signs and symptoms of an emergency and how to recognize them
- Name the steps in the cardiopulmonary resuscitation (CPR) process
- List the items that must be included in a basic emergency kit
- Discuss the use of a defibrillator in an emergency

## **COMMUNICATION AND PRACTICE MANAGEMENT PROCEDURES**

- Describe how to make corrections to a patient's record
- Explain the operation of the dental office
- Describe ways to increase patient rapport
- Describe specific ways to accommodate patients with special needs
- Explain the relevance of human behavior to practice management
- Describe cultural diversity
- Differentiate verbal and nonverbal communication
- Identify skills necessary for a successful working relationship with colleagues
- Identify some causes of job-related stress
- Explain the importance of good record keeping

## **FINANCIAL MANAGEMENT, DENTAL INSURANCE, AND SKILLS MARKETING**

- Demonstrate how to make financial arrangements with a patient
- Describe how insurance benefits are calculated
- Identify the importance and advantages of electronic claims
- Explain what constitutes insurance fraud
- Determine your career goals and develop a personal philosophy
- Explain how to identify potential career opportunities

**Note: This program can be completed in 6 months. However, students will have online access to this program for a 24-month period.**

## MICROSOFT OFFICE

- Module Use an integrated software package, specifically the applications included in the Microsoft Office suite
- Demonstrate marketable skills for enhanced employment opportunities
- Describe proper computer techniques for designing and producing various types of documents
- Demonstrate the common commands & techniques used in Windows desktop
- List the meaning of basic PC acronyms like MHz, MB, KB, HD and RAM
- Use WordPad and MSWord to create various types of documents
- Create headings and titles with Word Art
- Create and format spreadsheets, including the use of mathematical formulas
- Demonstrate a working knowledge of computer database functions, including putting, processing, querying and outputting data
- Define computer terminology in definition matching quizzes
- Use the Windows Paint program to alter graphics
- Use a presentation application to create a presentation with both text and graphics
- Copy data from one MS Office application to another application in the suite
- Use e-mail and the Internet to send Word and Excel file attachments
- Demonstrate how to use the Windows Taskbar and Windows Tooltips
- Explain how copyright laws pertain to data and graphics posted on the Internet
- Take the college computer competency test after course completion
- Follow oral and written directions and complete assignments when working under time limitations

**Note: Although the Microsoft Office Module is not required to successfully complete this program, students interested in pursuing free Microsoft MOS certification may want to consider completing this Microsoft Office Module at no additional cost.**

## **System Requirements:**

### **Windows Users:**

- Windows 8, 7, XP or Vista
- 56K modem or higher
- Soundcard & Speakers
- Firefox, Chrome or Microsoft Internet Explorer

### **Mac OS User:**

- Mac OS X or higher (in classic mode)
- 56K modem or higher
- Soundcard & Speakers
- Apple Safari

### **iPad Users:**

- Due to Flash limitations, eLearning programs are NOT compatible with iPads

### **Screen Resolution:**

- We recommend setting your screen resolution to 1024 x 768 pixels.

### **Browser Requirements:**

- System will support the two latest releases of each browser. When using older versions of a browser, users risk running into problems with the course software.
- Windows Users: Mozilla Firefox, Google Chrome, Microsoft Internet Explorer
- Mac OS Users: Safari, Google Chrome, Mozilla Firefox

### **Suggested Plug-ins:**

- Flash Player
- Real Player
- Adobe Reader
- Java