

# **Dental Assistant Professional Diploma (October 2024- June 2025)**

## **Course Descriptions:**

### **Semester 1: (9 weeks)**

#### **DNTL114      Sciences in Dentistry Credits: 2 (30 hours)**

This theory course includes the terminology and study of: basic human anatomy and physiology, the structures of the head, neck and oral cavity, and tooth development, eruption and morphology.

The knowledge gained by the student through this course is essential every day in the career of a Dental Assistant.

#### **DNTL116      Patient Information and Assessment Credits: 3 (35 hours)**

This theory course includes the terminology and study of the foundations related to: assessing a patient's overall and dental health status, collecting personal information, obtaining diagnostic information, working with medically compromised patients, obtaining and recording vital signs and assisting in medical emergencies. Also included is the study of: the basic principles of pharmacology and how to maintain and accurately complete dental records and clinical charts.

The knowledge gained by the student through this course will make them a valuable resource and an integral part of the dental team.

#### **DNTL118      Infection Prevention and Foundation for Clinical Dentistry Credits: 3 (32.5 hours)**

This theory course includes the terminology and study of: the chain of infection and methods of prevention and control of microorganisms, principles and techniques of disinfection and instrument processing and sterilization, safety and workplace hazardous waste management. Also included is the study of: the dental office, procedures for general operations of a dental office, team dentistry, the instruments and supplies used in general dental procedures and the importance of patient comfort during dental treatment with the use of moisture control, anaesthesia and pain control.

This course provides the foundational knowledge that Dental Assistants who; as healthcare professionals, require for seeking current evidence-based information to determine the best products, safest methods and most effective techniques to maintain a safe environment for themselves and their patients and to perform the intra-oral skills of: dental dam and topical anaesthetic.

**DNTL109      Oral Health and Prevention of Dental Disease**

**Credits: 2 (24.5 hours)**

This theory course includes the terminology and study of: dental caries, periodontal disease, periodontics, preventive dentistry, nutrition and oral pathology. Included in this course is the Oral Hygiene Instruction and Patient Education Booklet Assignment, to link the theory related to prevention, nutrition, oral hygiene instruction and patient education with the actual delivery of instruction to patients.

The knowledge gained by the student through this course serves as the foundation that Dental Assistants require to educate patients in oral health and prevention of disease and to perform the intra-oral skills of: application of anti-cariogenic agents, desensitizing agents and application and removal of periodontal dressing.

**DNTL110      Dental Assisting Clinical Practice I**

**Credits: 4 (89 hours)**

This practical course reinforces the foundational knowledge gained through the semester 1 co-requisite theory courses DNTL114, 116, 118 & 109.

Clinical practice and assessment is scheduled for; handwashing, operator infection control procedures, medical and dental histories, vital signs, chair positioning, topical anaesthetic, sterilization procedures, desensitizing agents and oral inspection.

Also included is the introductory level practice of: management of simulated medical emergencies, oral evacuation and instrument transfer, oral hygiene instruction and topical fluoride.

Emphasis is placed on safety procedures, infection control, professional decorum and the application of theory in a clinical situation.

**Prerequisite:**

CPR Level BLS (Basic Life Support)

## **Semester 2: (6 weeks)**

### **DNTL128      Dental Assisting Clinical Theory I Credits: 2 (28 hours)**

This theory course includes the terminology and study of general dentistry including: restorative and esthetic dental materials, dental bases, liners and bonding systems, matrices and wedges, impression materials, lab materials and procedures and dental cements.

The knowledge gained by the student through this course serves as the foundation that Dental Assistants require to assist in general dental restorative procedures and to perform the intra-oral skills of: bases and liners, matrices and wedges, provisional restorations and impressions.

#### **Prerequisites:**

CPR Level BLS (Basic Life Support) & successful completion of Semester 1 courses.

### **DNTL129      The Professional Dental Business Administrator Credits: 3 (46 hours)**

This theory course includes the terminology and study of conduct appropriate to a professional setting and dental administration including: the professional dental assistant, the dental healthcare team, dental ethics and the law, communication in the dental office, business operating systems and financial management. This course also includes Dental Computer Software training, which is required for patient care booking and the dental reception shift scheduled in semesters 3 & 4 of the program.

The student will be required to register as a student member of the CADA (College of Alberta Dental Assistants) to gain on-line access and successfully complete the *Code of Ethics, Patient Relations* and *Standards of Practice* Learning Modules.

The knowledge gained by the student through this course serves as the foundation that Dental Assistants require to perform as Dental Administrators in the Dental Practice.

#### **Prerequisites:**

CPR Level BLS (Basic Life Support) & successful completion of Semester 1 courses.

**DNTL150      Dental Assisting Clinical Practice II**  
**Credits: 5 (95 hours)**

This practical course reinforces the foundational knowledge gained through the semester 2 co-requisite course DNTL128.

Clinical practice and assessment is scheduled for; dental dam, oral evacuation, mixing cements, bases and liners, matrices and wedges, restorative procedures (composite resin and temporary-IRM), preliminary impressions and wax bites and pouring dental models.

Students practice medical emergencies, application and removal of periodontal dressing, and charting dental conditions and will experience a clinical shift scheduled as a sterilization clerk.

Emphasis is placed on safety procedures, infection control, professional decorum and the application of theory in a clinical situation.

**Prerequisite:**

CPR Level BLS (Basic Life Support) & successful completion of Semester 1 courses.

**Semester 3: (8 weeks)**

**DNTL139      Dental Assisting Clinical Theory II**  
**Credits: 3 (42.5 hours)**

This theory course includes the terminology and study of dental radiography and assisting in comprehensive dental care including: fixed prosthodontics, provisional coverage, oral surgery, dental sealants, orthodontics, endodontics, pediatric dentistry, polishing procedures, removable prosthodontics, dental implants and laboratory procedures for the fabrication of whitening trays, mouth guards and custom acrylic trays.

The knowledge gained by the student through this course serves as the foundation that Dental Assistants require to assist in dental specialty procedures, perform laboratory procedures and to perform the intra-oral skills of: dental radiographs, polishing procedures, pit and fissure sealants, suture removal, provisional coverage and pulp vitality testing.

**Prerequisite:**

CPR Level BLS (Basic Life Support) & successful completion of Semesters 1 & 2 courses.

**DNTL148      Dental Assisting Clinical Practice III**  
**Credits: 7 (139 hours)**

This practical course reinforces the foundational knowledge gained through the semester 3 co-requisite theory course DNTL139.

Clinical practice and assessment is scheduled for; sensor holding accessories, mounting radiographs, gingival retraction cord, crown prep procedure, provisional coverage, permanent cementation of crown and bridge procedure, extraction procedures, suture removal, endodontic procedure, pit and fissure sealants, and polishing procedure.

Students practice: medical emergencies, charting dental conditions, pulp vitality testing, digital scanning, intraoral camera and laboratory skills including: pouring, trimming and finishing study models and fabrication of custom whitening trays.

Also included is practice of pre-clinical skills including: patient assessment, patient education, nutritional counselling, oral hygiene instruction, radiographic procedures, and anticariogenic agents in preparation for Patient Care Clinics in Semester 4.

Emphasis is placed on safety procedures, infection control, professional decorum and the application of theory in a clinical situation.

**Prerequisites:**

CPR Level BLS (Basic Life Support) & successful completion of Semesters 1 & 2 courses.

**Semester 4: (4 weeks)**

**DNTL149      Workplace Transitions**  
**Credits: 2 (26 hours)**

This course is designed to transition the student into the workplace. Students will develop their skills in team dynamics through the preparation and delivery of the group assignments: Community Health Project and Dental Specialty Presentations. (**Unit 1**)

Students will also gain experience in preparing for and writing major cumulative examinations by writing a case-based Final Examination (**Unit 2**).

Important guest speakers deliver presentations (**Unit 3**) which are key for admission into the Profession of Dental Assisting including: application and registration processes for the *National Dental Assisting Examining Board* Exam and the *College of Alberta Dental Assistants* as well as post graduate services provided through Columbia College's Career Services department.

**Prerequisites:**

CPR Level BLS (Basic Life Support) & successful completion of Semesters 1, 2 & 3 courses.

**DNTL140      Dental Assisting Clinical Practice IV**  
**Credits: 7 (88 hours)**

In this practical course, students will provide services to the public with direct facilitator supervision. The facilitator will assess the student's performance to provide feedback and assist them in developing competency in the skills.

A Dentist will be on-site to prescribe; dental radiographs, sealants, sites to apply desensitizing agents, and patient candidacy for polishing and fluoride. Students will assess their patient's oral health condition to determine a patient centered plan for the delivery of; patient education, nutritional counselling and oral hygiene instruction, and will select appropriate polishing and topical fluoride agents for their patients who are candidates.

Also included are shifts for each student to act in supporting roles including; dental receptionist, sterilization clerk and clinical float assistant as well as clinical practice and assessment for; laboratory skills (study models, whitening trays, mouth guards and custom impression trays).

Emphasis is placed on safety procedures, infection control, professional decorum and the application of theory in a clinical situation.

**Prerequisites:**

CPR Level BLS (Basic Life Support) & successful completion of Semesters 1, 2 & 3 courses.

**Semester 5: (4 weeks)**

**DNTL199      Practicum**  
**Credits: 8 (143 hours)**

This course engages the students in a complete practicum experience in an external office setting performing the skills of a dental assistant in a ***general dental practice***.

**Unit 1-** Classes will lead students to securing a contract with their practicum office so they are prepared for the external practicum portion. Classroom activities will focus on discussion related to the Dental Assistant Student's responsibilities during their practicum including: the behaviors and attitudes that employers want.

**Unit 2-** Practicum will take place during the final 4 weeks of the program. To complete this course the student will engage in full time hours at their external practicum office setting for 35-40 hours per week for a minimum total of 140 hours. During this time the student will comply with the assigned hours of work and rules and regulations of the practicum office. The student will maintain communication with the practicum coordinator throughout their practicum by weekly reporting of the activities and procedures they are experiencing at their practicum office.

A formal evaluation of the student's performance will be completed by the practicum office supervisor in consultation with the practicum coordinator.

**Prerequisites:**

CPR Level BLS (Basic Life Support) & successful completion of Semesters 1, 2, 3 & 4 courses.