8593 Restorative Dentistry (11C)

30S/30E/30M

A Dental Assisting Course

Course Description

This course corresponds with the Red River College course *Operative Dentistry*. It deals with the

- formation and repair of dental decay
- roles and responsibilities of the dental assistant for restorative procedures
- manipulation of dental materials used in restorative dentistry
- process of fabricating mouthguards and whitening trays

Goal 1: Describe and apply appropriate **health and safety** practices as they relate to dental assisting.

- **GLO 1.1:** Describe and apply appropriate **health and safety** practices.
 - SLO 11C.1.1.1: Demonstrate an awareness of the principles of the Workplace Hazardous Materials Information System (WHMIS).SLO 11C.1.1.2: Apply health and safety legislation, regulations, and
 - standards. SLO 11C.1.1.3: Use infection-control techniques and apply standard
 - precautions to ensure patient and operator safety.
 - SLO 11C.1.1.4: Use pertinent personal and patient protection.
 - SLO 11C.1.1.5: Identify the injury-reporting process and the postexposure protocol.
 - SLO 11C.1.1.6: Apply knowledge of first aid and cardiopulmonary resuscitation (CPR).

GLO 1.2: Create and maintain a safe working environment.

- SLO 11C.1.2.1: Identify and report hazards in the workplace.
- SLO 11C.1.2.2: Demonstrate the ability to follow safety information on supplier labels and on equipment.
- SLO 11C.1.2.3: Demonstrate knowledge of safety equipment, such as a fire extinguisher, a first aid kit, and an eyewash station.
- SLO 11C.1.2.4: Identify safety precautions to be followed when using equipment, instruments, and materials.

- SLO 11C.1.2.5: Follow safe practices and procedures for facilities, equipment, instruments, and materials used in the workplace.
- SLO 11C.1.2.6: Apply standard safety precautions for clinical procedures.
- SLO 11C.1.2.7: Demonstrate the disposal of sharps in a puncture-proof container with a biohazardous waste label.

Goal 2: Demonstrate the safe and appropriate operation, maintenance, handling, and storage of equipment, instruments, materials, and consumable items.

GLO 2.1: Demonstrate the safe and appropriate operation, maintenance, and storage of equipment and instruments.

SLO 11C.2.1.1:	Demonstrate the safe and appropriate operation, maintenance, and storage of equipment and instruments used in restorative dentistry.
SLO 11C.2.1.2:	Demonstrate the use of various aids for moisture control.
SLO 11C.2.1.3:	Demonstrate the maintenance and storage of high-speed and low-speed handpieces.
SLO 11C.2.1.4:	Demonstrate the use, storage, and maintenance of a light-curing unit.
SLO 11C.2.1.5:	Describe the use of sterilizers.
SLO 11C.2.1.6:	Describe the use of lasers in dentistry and the safety precautions to be followed.

GLO 2.2: Demonstrate the safe and appropriate **handling and storage** of **materials and consumable items.**

SLO 11C.2.2.1:	Apply the manufacturers' instructions for the handling and storage of materials.
SLO 11C.2.2.2:	Demonstrate the safe handling of acrylates.
SLO 11C.2.2.3:	Demonstrate the appropriate use of etchant to ensure patient safety.
SLO 11C.2.2.4:	Describe the safe use of tooth-whitening agents.
SLO 11C.2.2.5:	Demonstrate the appropriate storage of dental materials.

- **Goal 3:** Demonstrate the ability to **assist** the operator when providing oral health care services.
 - **GLO 3.1:** Describe and demonstrate the dental assistant's role when **assisting** the operator with various procedures.
 - SLO 11C.3.1.1: Prepare a dental unit and assemble the armamentarium needed for a procedure.
 - SLO 11C.3.1.2: Demonstrate the procedure for greeting, seating, and dismissing a patient.
 - SLO 11C.3.1.3: Demonstrate the appropriate positioning of an operator, an assistant, and equipment, using operating zones.
 - SLO 11C.3.1.4: Apply the principles of four-handed dentistry while assisting an operator.
 - SLO 11C.3.1.5: Mix and manipulate materials required for a procedure.
 - SLO 11C.3.1.6: Identify and anticipate the operator's needs during a procedure.
 - SLO 11C.3.1.7: Demonstrate the ability to assist with patients who have special needs.
 - SLO 11C.3.1.8: Describe various methods of administering anaesthesia.
 - SLO 11C.3.1.9: Demonstrate the preparation of local anaesthetics and assist with their application.
- **Goal 4:** Demonstrate the ability to **provide** oral health care services for patients.
 - **GLO 4.1:** Describe and demonstrate the dental assistant's role when **providing** oral health care services.
 - SLO 11C.4.1.1: Demonstrate the preparation of a dental dam and assist with its application.
 - SLO 11C.4.1.2: Demonstrate oral evacuation for various areas of the oral cavity.
 - SLO 11C.4.1.3: Demonstrate the procedure for the fabrication and delivery of whitening trays and athletic mouthguards.
 - SLO 11C.4.1.4: Demonstrate the procedure for the fabrication and trimming of study models.
- **Goal 5:** Demonstrate an understanding of **career opportunities** in the dental profession.
 - **GLO 5.1:** Describe **post-secondary education and employment opportunities** in dental assisting and related professions.

No applicable SLOs.

Goal 6: Describe and demonstrate transferable **cross-curricular knowledge and skills** as they relate to dental assisting.

- **GLO 6.1:** Read, interpret, and communicate information related to dental assisting.
 - SLO 11C.6.1.1: Retrieve relevant information and use it when required.
 - SLO 11C.6.1.2: Demonstrate the ability to document patient information accurately.
 - SLO 11C.6.1.3: Demonstrate the ability to interpret patient records.
 - SLO 11C.6.1.4: Demonstrate effective listening skills, both in person and on the telephone.
 - SLO 11C.6.1.5: Use dental terminology when communicating in the workplace.
 - SLO 11C.6.1.6: Demonstrate the ability to communicate effectively with patients, the dental team, and other professionals related to dental health care.
 - SLO 11C.6.1.7: Demonstrate the ability to educate a patient, incorporating content relevant to the patient's needs.
- **GLO 6.2:** Demonstrate knowledge and skills related to **mathematics** used in dental assisting.
 - SLO 11C.6.2.1: Demonstrate knowledge of basic mathematics skills.
 - SLO 11C.6.2.2: Demonstrate mathematics skills needed for inventory control.
 - SLO 11C.6.2.3: Calculate and apply the principles of weight, measurement, temperature, and ratios.
- **GLO 6.3:** Demonstrate knowledge and skills related to **anatomy and physiology** used in dental assisting.
 - SLO 11C.6.3.1: Describe the physiological changes that occur in the body during anaesthesia.
- **GLO 6.4:** Demonstrate knowledge and skills related to **other subject areas** (science, physical education/health education, information and communication technology) used in dental assisting.
 - SLO 11C.6.4.1: Describe how nutrition affects the oral cavity.
 - SLO 11C.6.4.2: Describe how galvanism affects the oral cavity.
 - SLO 11C.6.4.3: Demonstrate an understanding of exothermic reactions as they apply to dental materials.

SLO 11C.6.4.4:	Demonstrate an understanding of the properties associated with the polymerization of materials.
SLO 11C.6.4.5:	Describe the differences between alkaline and acidic properties and their effects on teeth.
SLO 11C.6.4.6:	Demonstrate an understanding of the foundations of microbiology and ways to prevent the transmission of disease.
SLO 11C.6.4.7:	Describe scientific properties that affect the approval and usage of dental materials.

Goal 7: Demonstrate awareness of **sustainability** as it pertains to dentistry.

GLO 7.1: Describe the impact of **sustainability** on the **health and well-being** of dental assistants and their patients.

- SLO 11C.7.1.1: Recognize and respond to a patient's needs.
- SLO 11C.7.1.2: Describe physical, mental, and emotional health and their relationships to dental assisting.
- SLO 11C.7.1.3: Apply the principles of ergonomics when providing patient care.
- SLO 11C.7.1.4: Apply the principles of dentistry when educating and encouraging patients in maintaining oral health.

GLO 7.2: Describe the dental industry's **sustainability practices** and their **impact on the environment.**

- SLO 11C.7.2.1: Discuss the potential for increased sustainability in dentistry.
- SLO 11C.7.2.2: Demonstrate the safe handling and disposal of mercury found in amalgam.
- SLO 11C.7.2.3: Manage hazardous substances and wastes.
- SLO 11C.7.2.4: Demonstrate the storage and disposal of materials according to the manufacturers' instructions.

GLO 7.3: Describe **sustainable business practices** within the dental industry.

- SLO 11C.7.3.1: Identify economically sustainable practices within the workplace.
- SLO 11C.7.3.2: Describe the relationship between the economy and sustainable practices within the dental industry.

- SLO 11C.7.3.3: Describe business practices and work ethics to manage the dental office efficiently.
- SLO 11C.7.3.4: Evaluate patients' needs to maintain their satisfaction and loyalty.

Goal 8: Demonstrate **ethical and legal standards** as they pertain to the dental profession.

- **GLO 8.1:** Practise **ethical and legal standards** as they pertain to dental assisting.
 - SLO 11C.8.1.1: Practise the principles of dignity, equity, fairness, and respect in relating to patients.
 - SLO 11C.8.1.2: Maintain the Canadian Dental Assistants' Association's *Code of Ethics.*
 - SLO 11C.8.1.3: Provide patients with optimum health care.

Goal 9: Demonstrate **employability skills** related to dental assisting.

GLO 9.1: Demonstrate fundamental employability skills.

SLO 11C.9.1.1:	Demonstrate problem-solving skills.
SLO 11C.9.1.2:	Evaluate problems and implement appropriate solutions.

SLO 11C.9.1.3: Demonstrate professional conduct.

GLO 9.2: Demonstrate teamwork skills.

SLO 11C.9.2.1:	Work within the dynamics of the dental team.
SLO 11C.9.2.2:	Recognize and respect diversity and individual differences and perspectives.
SLO 11C.9.2.3:	Demonstrate the ability to manage and resolve conflict when appropriate.
SLO 11C.9.2.4:	Accept and provide feedback in a constructive and considerate manner.
SLO 11C.9.2.5:	Share information and expertise with the dental team.

GLO 9.3: Demonstrate personal management skills.

- SLO 11C.9.3.1: Demonstrate punctuality and reliability.
- SLO 11C.9.3.2: Demonstrate adaptability within various situations in the dental setting.
- SLO 11C.9.3.3: Demonstrate initiative and independence.
- SLO 11C.9.3.4: Demonstrate accountability for own actions in the dental setting.

- SLO 11C.9.3.5: Practise time-management strategies to manage the dental office efficiently.
- SLO 11C.9.3.6: Apply organizational skills in the dental practice.
- **GLO 9.4:** Demonstrate an understanding of the **business operation** of a dental office.
 - SLO 11C.9.4.1: Demonstrate a strong work ethic to ensure efficiency in the dental office.
 - SLO 11C.9.4.2: Maintain patient records.
 - SLO 11C.9.4.3: Describe business practices to manage the dental office efficiently.
 - SLO 11C.9.4.4: Describe strategies to ensure ongoing patient recall.

Goal 10: Demonstrate an understanding of the **evolution** of the dental profession, including its **technological progression** and **emerging trends**.

GLO 10.1: Describe the **evolution** of the dental profession, including its **technological progression** and **emerging trends**.

SLO 11C.10.1.1: Describe the evolution of restorative dentistry, including its technological advances and emerging trends.